Petition

81-1861

Supreme Court, U.S.
FILED
APR 6 1982
ALEXANDER L. STEVAS
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1981

NO. 81-1653

THE UNIVERSITY OF HOUSTON, ET AL.,
Petitioners

v.

JEANNINE W. WILKINS AND
SHARON D. HILL, Individually
and On Behalf of All Others
Similarly Situated
Respondents/Cross-Petitioners

CROSS-PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIFTH CIRCUIT

STUART M. NELKIN
CAROL NELKIN
NELKIN & NELKIN
5417 Chaucer
P. O. Box 25303
Houston, Texas 77265
(713) 526-4500
Counsel for Respondents/
Cross-Petitioners

Alpha Law Brief Co., Inc.—5606 Parkersburg—Houston, Texas 77036—223-3003

QUESTIONS PRESENTED FOR REVIEW

1. Whether the court below adopted and applied an erroneous allocation of the burden of proof in a Title VII class action by requiring Plaintiffs' initial burden of proof to be by a preponderance of the evidence rather than by a *prima facie* proof of discrimination.

2. Whether the court below erred in requiring that Plaintiffs' class compensation claims be proved by the statistical methodology of multiple regression analysis while prohibiting Plaintiffs from relying upon Defendants' regression analysis despite the court's own finding that Defendants' model proved Plaintiffs' claims to be statistically significant, particularly where the district court's opinion is devoid of any assessment of the parties' statistical proof.

3. Whether the court below erred by affirming the district court's endorsement of totally subjective selection methods and word of mouth recruiting for faculty positions by distinguishing controlling precedents of this Court and of the court below as being inapplicable to Plaintiffs' cause of action in that Plaintiffs' claims are based on sex discrimination rather than on race discrimination.

SUBJECT INDEX

	Page
QUESTIONS PRESENTED FOR REVIEW	I
TABLE OF AUTHORITIES	III
OPINIONS BELOW	1
JURISDICTION	2
STATUTES INVOLVED	2
STATEMENT OF THE CASE	2
A. PROCEDURAL OVERVIEW	2
B. SUMMARY OF PERTINENT EVIDENCE BEFORE THE DISTRICT COURT	4
C. THE DISTRICT COURT'S OPINION	8
D. THE COURT OF APPEALS' DECISIONS	11
REASONS FOR GRANTING THE WRIT	17
I. The Fifth Circuit Adopted And Applied An Erroneous Allocation Of The Burden Of Proof In A Title VII Class Action Which Requires Plaintiffs' Initial Burden Of Proof To Be A Preponderance Of The Evidence Rather Than A *Prima Facie* Proof Of Discrimination	17
II. The Fifth Circuit Erred By Requiring Proof By Multiple Regression Analysis For Plaintiffs' Class Compensation Claims And By Prohibiting Plaintiffs From Relying Upon The Defendants' Multiple Regression Analysis Despite The Court's Own Findings That The Analysis Proved Plaintiffs' Claims To Be Statistically Significant, Particularly Where The District Court's Opinion Is Totally Devoid Of Any Analysis Of The Statistical Proof And The Fifth Circuit Rejected The Regression Analysis Model Based Not On Actual Flaws In The Model But On Assumptions Imposed Upon The Model From Sources Outside The Record	22
III. The Fifth Circuit Erred By Affirming The District Court's Endorsement Of Totally Subjective Selection Methods And Word Of Mouth Recruiting For Faculty Positions By Distinguishing Controlling Precedents Of This Court And Of The Court Below As Being Inapplicable To Plaintiffs' Cause Of Action In that Plaintiffs' Claims Are Based On Sex Discrimination Rather Than Race Discrimination	26
CONCLUSION	29

TABLE OF AUTHORITIES

CASES — Page

Board of Trustees of Keene State College v. Sweeney, 439 U.S. 24 (1978) 17
Castaneda v. Partida, 430 U.S. 438 (1977) 23
Chrisner v. Complete Auto Transit, 645 F.2d 1251, n.5 (6th Cir. 1981) 24
Crawford v. Western Electric Co., Inc., 614 F.2d 1300 (5th Cir. 1980) 29
DeAnda v. St. Joseph Hospital, 28 FEP Cases 317 (5th Cir. 1982) 25
Dothard v. Rawlinson, 433 U.S. 321 (1977) 22
EEOC v. United Virginia Bank-Seaboard National, 555 F.2d 403 (5th Cir. 1977) 11
Fisher v. Proctor & Gamble Mfg. Co., 613 F.2d 527 (5th Cir. 1980) 29
Frontiero v. Richardson, 411 U.S. 677 (1973) 28
Furnco Construction Co. v. Waters, 438 U.S. 567 (1978) . 17
Gupta v. East Texas State University, 658 F.2d 411, 415 (5th Cir. 1981) 25
Hazelwood School District v. United States, 433 U.S. 299 (1977) 17, 22, 23
International Brotherhood of Teamsters v. United States, 431 U.S. 324 (1977) 17, 18, 19
James v. Stockham Valves & Fittings Co., 559 F.2d 310 (5th Cir. 1977), *cert. denied*, 434 U.S. 1034 (1978) 27, 29
Jefferies v. Harris County Community Action Ass'n, 615 F.2d 1025, 1031 (5th Cir. 1980) 25
Johnson v. Uncle Ben's, Inc., 628 F.2d 419 (5th Cir. 1980), *vacated and remanded on other grounds*, __U.S.__, 68 L.Ed.2d 290 (1981), *opinion on remand*, 657 F.2d 750 (5th Cir. 1981) 27
Lewis v. Tobacco Workers International Union, 577 F.2d 1135, 1146 (4th Cir. 1978) 11
McDonnell Douglas Corp. v. Green, 411 U.S. 792 (1973) . 17
Pouncey v. Prudential Ins. Co. of America, 668 F.2d 795, 798-9 (5th Cir. 1982) 21
Rowe v. General Motors Corp., 457 F.2d 348, 359 (5th Cir. 1979) 27
Scott v. City of Anniston, Alabama, 597 F.2d 897, 900 (5th Cir. 1979) 27
Terrell v. U.S. Pipe & Foundry Co., 644 F.2d 1112 (5th Cir. 1981) 21
Texas Department of Community Affairs v. Burdine, 450 U.S. 248 (1981) 17, 20, 21
United States v. Georgia Power Co., 474 F.2d 906 (5th Cir. 1973) 27

Page

STATUTES

Title VII, Civil Rights Act of 1964, 42 U.S.C. § 2000e, *et seq.* ..... *passim*

RULES

Federal Rules of Civil Procedure 52(a) 24, 25, 26

IN THE

Supreme Court of the United States

OCTOBER TERM, 1981

NO. 81-1653

THE UNIVERSITY OF HOUSTON, ET AL.,
Petitioners

v.

JEANNINE W. WILKINS AND
SHARON D. HILL, Individually
and On Behalf of All Others
Similarly Situated
Respondents/Cross-Petitioners

CROSS-PETITION FOR WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FIFTH CIRCUIT

Respondents/Cross-Petitioners, Jeannine W. Wilkins and Sharon D. Hill, respectfully pray that a Writ of Certiorari issue to review the judgment of the United States Court of Appeals for the Fifth Circuit in *Wilkins v. The University of Houston*, 654 F.2d 388, entered August 28, 1981, with rehearing denied on December 7, 1981.

OPINIONS BELOW

The opinion of the district court is reported at 471 F.Supp. 1054 (S.D. Tex. 1979), and is reprinted in the Appendix hereto. The first opinion of the Court of Appeals is reported at 654 F.2d 388 (5th Cir. 1981). The opinion of the Court of Appeals on rehearing is reported at 662 F.2d 1156 (5th Cir. 1981). Both opinions are reprinted in the Appendix hereto.

JURISDICTION

The judgment sought to be reviewed was entered on August 28, 1981. Appellants' Petition for Rehearing and Suggestion for Rehearing En Banc were denied on December 7, 1981. On March 8, 1982, Cross-Petitioners were served with the University of Houston's Petition for Writ of Certiorari. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1) and Sup. Ct. R. 19.5

STATUTES INVOLVED

Title VII of the Civil Rights Act of 1964 (hereinafter "Title VII"), 42 U.S.C. § 2000e, *et seq.*

STATEMENT OF THE CASE

A. Procedural Overview

Jeannine Wilkins and Sharon Hill, Respondents/Cross-Petitioners (hereinafter "Plaintiffs"), brought this civil action individually and on behalf of all female past, present and future employees of the University of Houston (hereinafter "U of H" or "Defendant") and KUHT-TV (hereinafter "KUHT" or "Defendant"), seeking relief from Defendants' alleged violations of 42 U.S.C. § 2000e, *et seq.* and state statutory and constitutional provisions prohibiting discrimination in employment on the basis of sex. Plaintiffs sought injunctive, declaratory and compensatory relief to redress Defendants' alleged discriminatory practices with respect to compensation, hiring, promotion and other terms and conditions of employment.

By Order dated May 18, 1978, the district court certified the case as a class action on behalf of all female persons who applied for or were employed by Defendants since June 14, 1972 or who might in the future apply for or be employed by Defendants in those jobs defined as faculty

or professional/administrative staff positions. During the period June 23 through July 3, 1978, the case was tried before Judge Ross Sterling. At trial the Plaintiffs presented testimonial, documentary and statistical evidence regarding Defendants' employment policies vis-a-vis the certified class with regard to hiring, assignment, promotion and salary. Additionally, the named Plaintiffs presented evidence as to their individual complaints of sex discrimination.

At the conclusion of Plaintiffs' direct case, Defendants moved for dismissal of all allegations and reurged their prior motion to decertify Plaintiffs' class action. The court overruled Defendants' motions. Thereafter Defendants called an expert witness and several fact witnesses in an attempt to rebut Plaintiffs' *prima facie* proof of class and individual discrimination.

On June 13, 1979, the court entered written findings of fact and conclusions of law. Final judgment was entered on June 15, 1979, and Plaintiffs filed their notice of appeal on July 12, 1979.

The Fifth Circuit affirmed on all issues except the compensation claims of a portion of the professional and administrative staff class members. The compensation claims of those professional administrative staff members who were in the academic division were remanded to the district court for determination of appropriate relief for the members of that subclass.

Thereafter, Plaintiffs filed a Petition for Rehearing and a Suggestion of Rehearing En Banc. Although the panel modified its original opinion, Plaintiffs' Petition for Rehearing and Suggestion of Rehearing En Banc were denied on December 7, 1981.

B. Summary Of Pertinent Evidence Before The District Court

The University of Houston is a state institution of higher education with its central campus located in Houston, Texas. Within each of the University's academic departments, faculty members are classified for purposes of promotion and pay in the traditional college ranks of instructor, assistant professor, associate professor, and full professor. In addition to its faculty members, the University of Houston employs a substantial number of persons in jobs which are referred to as professional and administrative staff positions. The "P&A Staff" as it is commonly called, consists of salaried as opposed to hourly paid employees of the U of H who hold supervisory and management level jobs at the University.

The applicable labor pool for hiring faculty at the U of H is nationwide. Although the number of women qualified to teach has rapidly increased since 1970 in all disciplines, U of H's hiring of faculty women has never reflected a proportion consonant with the national average.[1]

Recruitment for faculty hiring in all disciplines is conducted by the U of H on a nationwide basis through the use of advertisements in publications such as the *Chronicle of Higher Education* and through informal word of mouth

---

1. The percentage of women on the faculty has declined over the six years covered by this case despite a pattern of steadily increasing rates of faculty hiring, a consistently increasing faculty size, and the desirability of the U of H as a place of employment. From 1972 through 1976, the U of H hired 61 new full professors, and not one was female. From 1976 until the date of trial, 50 additional full-time professors had been hired and only 3 were female. The U of H hired 95 associate professors from 1972 through 1976, but only 2 were women. Since 1976, almost 60 faculty members have been hired at this rank and only 3 have been female. Where women constituted 12% of all associate professors in 1973, by 1977 they constituted only 8% and in 1978 they constituted only 9% of all associate professors at the U of H.

communication at national professional conventions and elsewhere. Much of the faculty recruitment and hiring results from selection procedures effected and enforced by all male or male-dominated recruitment committees. According to the evidence, recruitment committees often screen out eligible women before they can be seriously considered. At other times, qualified women have been overlooked for available full-time positions and have been offered only lesser paying, part-time, nontenure track employment where similarly or less qualified men have been hired into such available full-time positions. One manifestation of the subjective approach to hiring is that many faculty members have been hired at the U of H because of whom they know. Because in many of the departments the only persons to know are male, males are more frequently hired regardless of the comparative qualifications or relative availability of females.[2] Many faculty openings for which men were hired were advertised, filled and announced, all on the same day, reflecting the strong probability that a specific person had already been recruited and was the only person considered for an opening regardless of his comparative qualifications or the availability of other qualified persons.

Failure to hire qualified women except in the lowest paying positions and failure to promote qualified women are two threads of the fabric of class-wide sex-based discriminatory practices at U of H which permeate U of H employment practices. Salary policies are no different.

---

2. At the time of trial, numerous departments of the U of H employed no women on their full-time faculty at the rank of professor, associate professor or assistant professor and numerous other departments had only one woman on their full-time faculty at the rank of professor, associate professor or assistant professor. In the 1973 academic year, 32 departments at the U of H had no women. In 1974, 25 departments had no women. In 1975 and 1976, 27 departments had no female faculty members. In 1977 the number of departments having no women at all increased to 30 and in 1978, 22 departments were exclusively male.

Women who have been hired or promoted have not been paid equivalently to similarly situated men. According to the statistical evidence, all class members employed by the U of H during the pertinent years of this litigation on the average have suffered a pay differential beginning in 1972-73 of $469.00 per month and increasing every year thereafter. According to Plaintiffs' expert witness, Dr. Robert Thrall, the likelihood that this gender differential occurred randomly or by chance is so remote (in a range from 13 to 17 standard deviations from the mean) as to rule out chance as a factor in explaining the differential. Similarly, Dr. Thrall's analysis demonstrated that over the years covered by this case full time female faculty members as a group were on the average paid less than men as a group. This average differential ranged from $300.00 per month in 1972-73 to $500.00 per month in 1977-78. Again, the probability of such a differential having occurred randomly or by chance is so remote (in a range of 7 to 9 standard deviations from the mean) as to rule out chance as a factor in explaining the differential.

Dr. Thrall undertook to analyze these large differentials in salary to see if there were some reasonable explanation for men and women to be treated so differently. Recognizing that the gender-based pay differential could possibly be caused by differences in the relative number of men and women in the various disciplines which might have widely differing market values, Dr. Thrall conducted an analysis to filter out any bias in the data which might be explained by the fact that more men than women were hired in relatively higher paying areas. Dr. Thrall's analysis conclusively established that the gender based differential was not a function of either the college in which a particular faculty member is employed or the market value of the faculty member's particular discipline. Women

have been paid less than men as a group in every college on the U of H campus which has hired women. Dr. Thrall calculated the statistical significance of such differentials and found the standard deviations to range from slightly under 6 to slightly over 9. From this analysis Dr. Thrall testified that it was impossible to conclude that U of H's male and female faculty members have been treated equally with regard to pay.

Because Title VII was not applicable to state universities until 1972, Dr. Thrall additionally conducted an analysis which compared only those faculty members hired after 1972 to determine if they had been treated equally with regard to pay. This analysis revealed average monthly pay differentials ranging from $187.87 in 1972 to $464.97 in 1978. The probability of such a salary differential among new hires occurring by chance proved statistically to be highly unlikely.

Moreover, the salary differential among male and female faculty members of the University of Houston cannot be explained by differences in rank among the various faculty members employed full-time at the University of Houston. Plaintiffs' expert witness conducted an analysis which revealed that throughout the six year period in question, male full-time faculty members were paid more than women in the same rank with the exception of the low-paying rank of instructor where women out-earned their male colleagues by a small amount. Plaintiffs' expert conducted one further analysis of the salary structure for faculty members at the University of Houston and discovered that the differential in pay between male and female faculty members cannot be explained by differences in length of service.

As is true with female faculty members, the salaries paid professional and administrative staff women have consistently been lower than those paid to men. The differ-

ence in pay per month for these class members averaged from $480.00 below their male colleagues in 1973 to $528.00 below in 1978. Such pay differentials are measured by standard deviations from slightly over 6 to 11 which led Dr. Thrall to conclude that the pay differentials could not have happened by chance. As he had done with the faculty data, Dr. Thrall analyzed the salary disparities between Defendants' male and female P&A employees in an attempt to logically explain the differences in pay. According to Dr. Thrall's testimony, female employees within the P&A staff, unlike their male counterparts, are not compensated for their academic qualifications. Indeed, according to the evidence, in every year pertinent to this suit, the mean salaries of male P&A employees with only a bachelor's degree have been greater by far than the mean salaries of female P&A employees with Ph.D. and masters degrees. Men with no college degree at all are paid more than women with a college degree for all six years in question. The statistical evidence shows that the length of service of a female P&A employee does not assist her in achieving salary equity with her male counterparts. Salary differentials between newly hired male and female P&A employees commence at $200.00 to $250.00 per month and escalate dramatically for each year of service thereafter. The statistical data reveals that salary differentials between men and women P&A employees increased with additional experience to as much as $600.00 to $800.00 per month.

C. The District Court's Opinion

The district court inexplicably failed to deal at all with Plaintiffs' comprehensive statistical presentation other than to state that "Plaintiffs through their statistical analysis . . . have failed to prove *by a preponderance of the evidence* that Defendants' employment practices provide disparate treatment to men and women faculty members." (Emphasis added.)

Despite Plaintiffs' extraordinary amount of statistical proof, the district court specifically held that Plaintiffs had made a *prima facie* case of discrimination only with regard to hiring female faculty members. Moreover, having held that Plaintiffs had presented a *prima facie* case of hiring discrimination with regard to faculty members, the court simply stated without discussion that it was convinced by Defendants' evidence that the low number of women in faculty positions was due to the unavailability of women in the national market for such positions.

The district court quite understandably does not state what aspect of Defendants' evidence gives rise to such a conclusion. The only evidence whatsoever offered by Defendants concerning availability of female faculty members can be found in Defendants' Exhibit 20. Defendants' Exhibit 20 itself reveals that, although the number of Ph.D. recipients nationally in the United States has decreased in the 1970s, the number of female Ph.D. recipients, which was never a zero number, has continued to increase.

Additionally, the district court chose to totally ignore Plaintiffs' evidence concerning availability of faculty women. While Defendants' Exhibit 20 deals with Ph.D. recipients, many of whom do not seek careers in university faculty positions, Plaintiffs presented availability studies based upon the national percentage of women and men who actually sought university faculty positions. Using data obtained from the U.S. Department of Labor, Bureau of Labor Statistics, Plaintiffs demonstrated that nationally the percentage of women seeking university faculty positions increased each year from 1973 when the percentage was 29.8% of the total number to 32.3% of the number of persons seeking faculty positions in 1978. Plaintiffs also demonstrated that at no time did the University of Houston hire women into its faculty in

such proportions comparable to the males it hired. Indeed, Plaintiffs' testimony showed that had the University of Houston hired according to the availability of female faculty members nationwide, the U of H would have hired at least 75 additional female faculty members from 1973 to 1978.

Despite Plaintiffs' showing that women are disproportionately excluded from faculty appointments at the University of Houston, the district court nonetheless upheld Defendants' word of mouth recruiting of applicants and the hiring of faculty based upon "whom you know" rather than "what you know" standards. The district court was of the opinion that hiring which is "standardless, arbitrary, and 'cliquish' " is simply a way of life within the academic community and has no legally actionable impact upon the employment opportunities of females seeking faculty positions at the U of H. In keeping with its acceptance of subjective recruitment procedures, the district court approved Defendants' highly subjective promotion practices by holding as a matter of law that "a subjective procedure for promotion is a necessary, indispensable, and bona fide means for determining promotion in the academic field." In effect, the district court, without citing any supporting case law, held that promotion and tenure decisions of colleges and universities are immune from the mandate of Title VII.

Without analyzing at all either the Plaintiffs' or the Defendants' extensive statistical analysis concerning faculty compensation claims and in sharp contrast to the evidence presented, the district court found "that any variations in salary among faculty men and women were due to market place values imposed upon the various schools of the University."

The district court's findings concerning the treatment of professional and administrative staff personnel suffer

from the same faulty legal and factual underpinnings as do the court's findings concerning faculty positions. The district court determined that whatever sex discrimination existed for the P&A staff in salary and promotions was eradicated by the implementation of a P&A Task Force Pay Plan. However, the evidence is uncontroverted that, although the professional and administrative pay plan was formulated in 1975, it was not implemented at all until 1977 and then only partially. Thus, whatever benefits women within the P&A staff classifications may or may not have obtained by the implementation of the pay plan, it is clear that for the years 1973 through 1977 the pay plan was not a factor in their salaries.

Although the district court attempted, however superficially and incorrectly, to analyze Plaintiffs' proof of hiring discrimination within the confines of established burden of proof standards, the court's findings concerning the class promotion and salary issues are devoid of any such considerations. The district court's findings with regard to Plaintiffs' class claims are simply stated in terms of ultimate facts with the district court making no analysis of the vast statistical, testimonial, and documentary evidence presented by the parties or the weight to be accorded it. There is a total "absence of a critical review of the relevant facts culminating in a coherent body of factual findings which is particularly called for in a discrimination case." *Lewis v. Tobacco Workers International Union*, 577 F.2d 1135, 1146 (4th Cir. 1978); *EEOC v. United Virginia Bank-Seaboard National*, 555 F.2d 403 (5th Cir. 1977).

D. The Court Of Appeals' Decisions

Although the district court's findings concerning Plaintiffs' class claims are rendered in terms of ultimate facts, the Court of Appeals in its original decision makes an exhaustive study of underlying subsidiary facts which were not at all dealt with initially by the district court.

Instead of remanding to the district court for more complete findings of fact, the panel of the Fifth Circuit took it upon itself to flesh out the facts which the district court neglected. In so doing, the panel assumed facts which were incorrect, relied upon information outside the record, and utilized inappropriate statistical calculations performed by the panel itself without the benefit of expert statistical input. As a result, the panel's factual findings are woefully inaccurate and legally impermissible.

While this exhaustive finding of subsidiary facts by the Court of Appeals permeates both decisions rendered by the court, two noteworthy examples will demonstrate the way in which the Court of Appeals perceived its role as the trier of facts as opposed to the appellate review forum it is intended to be.

The most obvious flaw in the panel's analysis of Defendants' hiring patterns is contained in its determination that Plaintiffs' availability data inappropriately includes all college and university teachers without regard to the degree held. Since many junior colleges and community colleges employ teachers who do not have advanced degrees, the panel reasoned that this data does not accurately reflect the number of persons available for positions at the U of H because, in the panel's opinion, the U of H only employed persons who had obtained a doctorate degree. The district court, of course, made no finding as to whether or not a doctorate degree is required by the U of H. Clearly, no such degree is required. As late as 1977, the U of H hired and promoted a substantial number of persons who had obtained only a bachelor or masters degree.[3] Thus, the perceived flaw in

3. The Appendix hereto contains a listing for the Court's convenience of data found in Plaintiffs' Exhibit 39E which indicates those faculty members employed in 1977 who held a degree other than a doctorate. Close to 500 faculty members are indicated as having degrees other than a Ph.D.

Plaintiffs' availability data is in fact a more accurate demonstration of the numbers of persons available for hire and promotion by the U of H than is the source relied upon by the court below which only indicates the percentage of doctorate degrees awarded in the one year period during 1977, a date well into the relevant time-frame of Plaintiffs' cause of action.[4]

Based upon its erroneous and inappropriate use of availability statistics, the panel then undertook the performance of statistical calculations at Footnotes 11 and 12 which, if done correctly, might be appropriate by way of expert testimony before the trial court, but are not appropriate for an appellate tribunal. The inappropriateness for such analysis by the appellate court is made evident by the statistically incorrect calculations. If one accepts the panel's findings that women are available for the jobs in question at the rate of 30.4%, the fact that Defendants' employed female instructors at the rate of 37.5% but only employed assistant professors at the rate of 26% indicates that Defendants' have utilized females as instructors to a greater degree than one would expect and have hired assistant professors at a rate below their availability. When the panel calculated the significance of these percentages it merged the two categories, thus masking the fact that instructors were disproportionately female and assistant professors were underutilized.

As is pointed out above, the district court dealt with Plaintiffs' faculty compensation claims in a cursory manner. Once again, the panel took upon itself to find facts outside the district court's opinion and to utilize and rely upon information outside the record as the basis for its rulings. After analyzing Plaintiffs' initial demonstra-

---

4. Moreover, the panel's determination that only persons with advanced degrees are hired by the U of H is contradicted by the court's own finding that a number of instructors at the U of H are graduate students who have not yet obtained their doctorates.

tion of inequalities in faculty compensation, the Court of Appeals held that:

> Had the University presented no evidence on the faculty compensation issue, our task would be completed by the finding that Plaintiffs' statistical evidence *did not prove* discrimination. (Emphasis added)

Although, of course, Plaintiffs' burden at that point was only proof at a *prima facie* level, the Court of Appeals went on to analyze Defendants' statistical analysis at great length in terms of Plaintiffs' claim that Defendants' testimony, rather than rebutting, actually confirmed Plaintiffs' claim. Without dealing with Plaintiffs' compensation claim in terms of *prima facie* proof and attempted rebuttal, the panel simply undertook to analyze Defendants' claim in terms of whether or not the Defendants' model proved Plaintiffs' compensation claim.

With regard to Defendants' regression analysis the Court of Appeals held:

> Plaintiffs' argument that this evidence satisfies their burden of proving a pattern and practice of discrimination with respect to faculty compensation may be correct—a T-statistic test demonstrates that the coefficient for the sex variable is significant.

Despite its finding of statistically significant proof on this vital issue of faculty compensation, the Court of Appeals went on to hold:

> However, other aspects of the statistical evidence apparently are inconsistent with this conclusion, and there are a number of questions as to the validity of the multiple regression model as a whole. Moreover, the only expert to testify on the subject stated that in his opinion the multiple regression analysis did not establish that the University discriminated against women with respect to faculty compensation. Accordingly, we decline to reverse the trial court's judgment on this claim.

Of course, the trial court did not in any way deal with the testimony of Dr. Downs, Defendants' expert, to whom the panel refers. As to the question of validity of Defendants' multiple regression analysis, no issue of invalidity was before the court. Dr. Downs testified at length concerning the rationale of his model. Plaintiffs' did not choose to contest the validity of the model and therefore had no reason to cross-examine Dr. Downs at length concerning the obvious rationale of the regression analysis. The district court did not in any way question or analyze the model's validity. The Court of Appeals' statements concerning the *possibility* that the model may or may not be valid do not arise from any source within the record but rather arise from an outside source, in particularly a law review article cited by the Court of Appeals. While the Court of Appeals does not determine that the model is invalid based upon the "testimony" contained within the law review article, it does refuse to credit the model as probative evidence based upon assumptions within the law review article which do not relate to the model at issue.

The perceived inconsistencies found by the Court of Appeals were in fact due to mistaken testimony of Dr. Downs, which was corrected after trial by submission of a "Suggestion of Error in Statistical Presentation" submitted by the Defendants to the district court. Dr. Downs mistakenly based his testimonial conclusions upon his belief that he was analyzing data produced by a regression analysis which had not ultilized a sex variable when, in fact, the data he was analyzing was the product of a regression analysis model which had utilized a sex variable. Although Defendants submitted their Suggestion of Error to the district court prior to decision and referenced the Suggestion of Error both in their Court of Appeals brief and during oral argument, the mistaken testimony

was apparently undetected by the panel. However, Plaintiffs' Petition for Rehearing and Suggestion for Rehearing En Banc demonstrated that when the correct information was utilized it was statistically demonstrated that female faculty members earned less than their male counterparts when all the relevant factors of degree, department, length of service, and experience were simultaneously considered. Plaintiffs also demonstrated that the differences between male and female faculty wages were statistically significant.

In the *per curiam* opinion in which Plaintiffs' Petition for Rehearing and Suggestions for Rehearing En Banc were denied, the panel recanted its prior statements by finding that:

> Contrary to what we stated in our original opinion, it does appear on the basis of the University's own sex free regression analysis that faculty women in general were paid less than the amount predicted by the model, while men were paid more. Nonetheless, we still adhere to our original conclusion and affirm the district court on the class plaintiffs' faculty compensation claim.

While recognizing such differences in the salaries had less than 8 chances in 10,000 of happening by chance, the Court of Appeals once again maintained that the differences in male and female salaries "*may or may not be*" statistically significant depending on the "validity" of the model. The Court of Appeals once again stated that only one expert had laid the foundation for the validity of the model and that expert was not Plaintiffs. Thus, apparently because Plaintiffs purported to use the University's statistics for their own purposes and relied upon Defendants' expert to lay the foundation for the model, and because the Plaintiffs' did not address the issues raised in the law review article relied upon by the

Court of Appeals, the court refused to credit the testimony which it recognized as being statistically significant.[5]

REASONS FOR GRANTING THE WRIT

I. The Fifth Circuit Adopted And Applied An Erroneous Allocation Of The Burden Of Proof In A Title VII Class Action Which Requires Plaintiffs' Initial Burden Of Proof To Be By A Preponderance Of The Evidence Rather Than By A Prima Facie Proof Of Discrimination.

This Court has on numerous occasions addressed the important issue of the allocation of the burden of proof in a Title VII cause of action. *Texas Department of Community Affairs v. Burdine*, 450 U.S. 248 (1981); *International Brotherhood of Teamsters v. United States*, 431 U.S. 324 (1977); *McDonnell Douglas Corp. v. Green*, 411 U.S. 792 (1973); *Furnco Construction Co. v. Waters*, 438 U.S. 567 (1978); *Board of Trustees of Keene State College v. Sweeney*, 439 U.S. 24 (1978); *Hazelwood School District v. United States*, 433 U.S. 299 (1977). Regardless of whether or not the Court was assessing the burden of proof in a class action

---

5. By way of footnotes the Court also indicated that the model *might* be invalid because the model with a sex variable only explained .8% more of the variation around the average salary than did the model without sex and the model only explains 52 to 53% of the total variation in average salary. However, if sex is a surrogate (i.e., is significantly correlated with another variable), the sex variable may be important on its own but because of its correlation with the other variable already present in the analysis, the importance of the sex variable will be masked.

Defendants urged repeatedly and the panel intimated that the department in which a faculty member taught could be a surrogate for sex in that many departments which had high market value salaries were predominantly or exclusively male. In Defendants' models, the relationship between the departmental variable and the sex variable demonstrates that the departments variable is sex dependent. Thus, it would not be expected that the model with sex would explain a great deal more in the way of predicting salaries than would the sex free model containing the highly correlated departmental surrogate for sex.

or an individual claim of discrimination, or whether the Court was analyzing a claim of disparate treatment or disparate impact, the Court has consistently dealt with a standard of proof requiring only an initial *prima facie* demonstration of discrimination as the initial burden imposed upon a Title VII plaintiff. Contrary to the controlling pronouncements of this Court, the Fifth Circuit initially imposed upon the Plaintiffs the requirement of proof by a preponderance of the evidence rather than by an initial *prima facie* demonstration of discrimination. The panel's erroneous perception of Plaintiffs' burden is critical in that Defendants offered no rebuttal whatsoever to Plaintiffs' proof concerning the P&A staff and other major issues presented.

In setting out its initial analysis of Plaintiffs' burden the Court of Appeals states:

> Furthermore, Plaintiffs' class claims, alleging that the University engaged in a system-wide pattern or practice of discriminating against women, cannot succeed on the basis of proof of "the mere occurrence of isolated or 'accidental' or sporadic discriminatory acts." Rather, Plaintiffs had to establish by a preponderance of the evidence that sex discrimination was the University's standard operating procedure—the regular rather than the unusual practice.

The Court of Appeals cites as its authority for the standard of proof it required this Court's opinion in *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 336 (1977). However, in extracting from the *Teamsters* decision what it believed to be the appropriate burden of proof, the Court of Appeals ignored the entire statement by this Court as to what the Plaintiffs' burden would be. In *Teamsters* this Court set out the Plaintiffs' burden of proof as follows:

> As the Plaintiff, the Government bore *the initial burden of making out a prima facie case of discrimi-*

> *nation. Albemarle Paper Co. v. Moody,* 422 U.S. 405, 425; *McDonnell Douglas Corp. v. Green, supra* at 802. And, because it alleged a system-wide pattern or practice of resistence to the full enjoyment of Title VII rights, the Government *ultimately* had to prove more than the mere occurrence of isolated or "accidental" or sporadic discriminatory acts. (Emphasis added.)

431 U.S. at 336. The Court of Appeals repeated its above-stated interpretation of *Teamsters* with regard to Plaintiffs' claim of discrimination in promotional opportunities for faculty women.

The Court of Appeals' failure to analyze Plaintiffs' claims under the appropriate standard of proof is perhaps most apparent in its treatment of Plaintiffs' compensation claims. The Court recognizes that Plaintiffs demonstrated statistically that when comparing male and female faculty members on the basis of the relevant factors of rank, college and length of service, whether looking at all faculty or only those hired after 1972 when Title VII became applicable to the U of H, in no instance was the pattern of male versus female salary other than more favorable to the males. Certainly, statistically significant comparisons over a substantial number of years which demonstrate a repetitive pattern of higher compensation for males than females rise to the level of a *prima facie* demonstration of sex discrimination in faculty compensation. The Court of Appeals, however, did not analyze Plaintiffs' compensation claims in terms of a *prima facie* demonstration but instead held that because Plaintiffs did not analyze all these factors simultaneously "Plaintiffs' statistical evidence *did not prove discrimination.*" [Emphasis added.]

The panel's disregard of the well-established allocation of the burden of proof in a Title VII class action and its insistence upon piecemeal analysis of probative evidence

are likewise apparent in the treatment afforded the claims of class members employed in P&A staff positions. Focusing on selected bits of evidence, the Court states "the issue is whether this is sufficient to establish by *a preponderance of the evidence* that U of H engaged in a pattern or practice of discriminating against its P&A women employees in compensating them;" [emphasis added].

Apparently, the panel of the Fifth Circuit departed from the substantial body of precedential decisions involving burden of proof in Title VII litigation due to a misapplication of this Court's recent decision in *Texas Department of Community Affairs v. Burdine, supra.*

In *Burdine* this Court reversed a decision of the Fifth Circuit which had held that upon presentation of a *prima facie* case of discrimination, the burden of proof shifted to the Defendant. This Court held that it was incorrect to place upon the defendant the burden of persuasion as to the existence of non-discriminatory reasons for the employment decision in question and that, contrary to earlier rulings of the Fifth Circuit, the burden of persuasion always remained with the plaintiff in a Title VII cause of action. Thus, the defendant's burden is that of production not of persuasion. However, this Court made it abundantly clear that while the plaintiff bore the ultimate burden of persuasion by a preponderance of the evidence, the initial burden of the plaintiff remained as it had been previously, *i.e.*, a *prima facie* showing of discrimination.

Nonetheless, in a decision rendered after the instant opinion which cites liberally to *Burdine* and to the *Wilkins* case, the Fifth Circuit clearly holds that there is no reason to decide whether or not the Plaintiffs made out a *prima facie* case of discrimination since it is clear from the evidence they could not bear their ultimate burden

of proof. *Pouncey v. Prudential Ins. Co. of America,* 668 F.2d 795, 798-9 (5th Cir. 1982).

At footnote 7 of *Burdine,* this Court anticipated the error committed by the Fifth Circuit in the instant case by explaining:

> The phrase "prima facie case" may denote not only the establishment of a legally mandatory, rebuttable presumption, but also may be used by courts to describe the plaintiffs' burden of producing enough evidence to permit the trier of fact to infer the fact at issue. 9 Wigmore, Evidence § 2494 (3d ed. 1940). McDonnell Douglas should have made it apparent that in the Title VII context we use "prima facie case" in the former sense.

____U.S.____, 67 L.Ed.2d 207, 217, Fn. 7 (1981). It is clear that if the Fifth Circuit utilized the concept of a *prima facie* case at all to assess the proof offered by Plaintiffs, it applied *prima facie* in the latter sense of requiring Plaintiffs to produce enough evidence to permit the trier of fact to infer the fact at issue.

Along with a refusal to view Plaintiffs' claims under the correct burden of proof standards, the panel's decision is permeated by a refusal to review Plaintiffs' evidence in its totality and to credit the cumulative effect of Plaintiffs' evidence. *See, Terrell v. U.S. Pipe & Foundry Co.,* 644 F.2d 1112 (5th Cir. 1981). For example, the panel analyzed the extensive data contained in Plaintiffs' Exhibits 39 and 41 in terms of Plaintiffs' claim of discrimination in compensation. Finding that Plaintiffs' analyses contained in Exhibit 41 were inadequate to prove Plaintiffs' compensation claim, the panel ignores the evidence for any other purpose.

The panel's refusal to view the evidence in its totality is further demonstrated by the treatment afforded Plaintiffs' hiring claims. Having determined that Plaintiffs'

demonstration of underemployment of female faculty members is statistically significant, the panel nevertheless rejects the underemployment determination at the *prima facie level* due to what the panel perceived to be Plaintiffs' failure to utilize reliable availability data showing the number of women qualified to hold faculty positions at U of H. The burden placed upon Plaintiffs by the panel is impermissibly more stringent than the requirements set forth in the leading Supreme Court decision dealing with availability issues. *Hazelwood School District v. United States*, 433 U.S. 299 (1977).[6]

The misapplication of important and recent opinions of this Court affecting the rights of parties to have their claims fairly and justly adjudicated in the sensitive area of employment discrimination law should not be permitted to stand.

II. The Fifth Circuit Erred By Requiring Proof By Multiple Regression Analysis For Plaintiffs' Class Compensation Claims And By Prohibiting Plaintiffs From Relying Upon The Defendants' Multiple Regression Analysis Despite The Court's Own Findings That The Analysis Proved Plaintiffs' Claims To Be Statistically Significant, Particularly Where The District Court's Opinion Is Totally Devoid Of Any Analysis Of The Statistical Proof And The Fifth Circuit Rejected The Regression Analysis Model Based Not On Actual Flaws In The Model But On Assumptions Imposed Upon The Model From Sources Outside The Record.

---

6. As stated by Justice Stevens, "Absolute precision in the analysis of market data is too much to expect." 433 U.S. at 318; *see also Dothard v. Rawlinson*, 433 U.S. 321 (1977). In this regard, of great significance in this case is the panel's own admission that "Arguably, *Hazelwood* dictates that the proper comparison in this case is the one made by plaintiffs."

As is more fully set out in Section D of this petition, Plaintiffs offered extensive statistical analyses which were modeled on the standard statistical methods of proof previously found acceptable to this Court in such landmark decisions as *Hazelwood School District v. United States, supra,* and *Castaneda v. Partida,* 430 U.S. 482 (1977). Plaintiffs' proof was rejected at the *prima facie* level by the Court of Appeals because the panel believed that in order to prove their claims statistically, Plaintiffs must utilize the statistical methodology of multiple regression analysis, which would compare a number of relevant factors simultaneously. While Plaintiffs do not disagree that a multiple regression analysis is a useful tool in presenting statistical evidence, the Fifth Circuit incorrectly assumed that such an analysis, ". . . may be the best, if not the only, means of proving classwide discrimination with respect to compensation in a case such as this. . . ." The inappropriateness of the panel's holding is readily apparent from its application to Plaintiffs' compensation claims for the P&A staff class.

The panel, as it did with the faculty compensation claims, rejected Plaintiffs' statistical showing for failure to analyze simultaneously all those factors which contribute to a P&A staff employee's salary. However, it was clear from the evidence that such a showing for the P&A staff was virtually impossible.

The undisputed evidence with regard to the P&A staff employees is that throughout the period relevant to this lawsuit, Defendants hired, assigned, and paid P&A staff according to standardless, arbitrary procedures. Indeed, Dr. Downs testified that he had not done a regression analysis on the P&A staff because he could not ascertain what factors would be relevant to such a study. If Defendants could not ascertain the relevant factors to utilize for a multiple regression analysis then expecting Plain-

tiffs to do so imposes an extreme burden on the Plaintiffs. "Where the existence of necessary qualifications is not readily apparent, the burden is on the Defendant to demonstrate that 'the positions do in fact require special qualifications not possessed or readily acquired by the general population.' " *Chrisner v. Complete Auto Transit,* 645 F.2d 1251, n.5 (6th Cir. 1981).

Despite having determined that regression analysis is the best, if not the only means of performing the requisite statistical analysis of Plaintiffs' class compensation claims and having determined that the regression analysis utilized by Defendants themselves demonstrated at a statistically significant level that female faculty members suffered on the average a salary deficit of $1,388 per year solely attributable to their sex, the panel rejected the inescapable conclusion such proof demands. As is discussed in Section D herein, the basis for the panel's rejection of the statistical proof is the panel's conclusion, based upon its reading of a law review article, totally outside the record and relied upon by no party or the district court, that the regression model may or may not be valid. For an appellate court to impose upon a plaintiff the task of anticipating and resolving evidentiary matters not contested nor in any way presented to the district court places upon the plaintiff a Kafkaesque burden not compatible with the American judicial system.

Moreover, to the extent the panel scrutinized the statistical proof without benefit of a single comment from the district court, the panel subverted the role of the district court and became not a court of review but the initial trier of factual issues. Where the issues are not addressed, no specific findings are made, and no attempt to evaluate the evidence is presented by the trial judge, the lower court's opinion does not meet the requirements of Rule 52(a), F. R. Civ. P., and a full understanding

of the issues to be resolved on appeal cannot be reached. *Jefferies v. Harris County Community Action Ass'n*, 615 F.2d 1025, 1031 (5th Cir. 1980); *see also Gupta v. East Texas State University*, 658 F.2d 411, 415 (5th Cir. 1981).

While the Fifth Circuit itself in *Jefferies, supra,* and *Gupta, supra,* has recognized the importance of adequate findings of fact on behalf of the district court to insure proper review by the higher courts, the *Wilkins* panel ignored the fundamental premise of trial by the district court and review by the appellate court due to the Fifth Circuit's pronouncements concerning the standard of review in a Title VII cause of action. Under Fifth Circuit precedent, the Court of Appeals is not bound by the "clearly erroneous rule," Fed. R. Civ. P. 52(a), and may make an independent determination of the ultimate finding of fact as to whether or not unlawful discrimination occurred. The problems inherent in applying this standard of review have been recognized recently by the Fifth Circuit itself. In *DeAnda v. St. Joseph Hospital,* 28 FEP Cases 317 (5th Cir. 1982), the court acknowledged at footnote 8:

> We note that there are seemingly unanswered questions about what is a "subsidiary fact" and what is an "ultimate fact" in a Title VII case. *See, e.g., Bickel v. Burkhart,* 632 F.2d 1251, 1255 n. 5 (5th Cir. 1980) (where the court comments that "[t]here is some uncertainty as to the proper scope of appellate review of a trial court's resolution of . . . [the] causation issue [in a retaliation case]," citing *Van Ooteghem v. Gray,* 628 F.2d 488, 491 (5th Cir. 1980). Whether other questions of fact are subject to the clearly erroneous standard is also uncertain. *see, Merriweather v. Hercules,* 631 F.2d 1161, 26 REP Cases 733 (5th Cir. 1980) (holding that pretext is subject to the clearly erroneous standard). *Compare, Ramirez v. Sloss,* 615 F.2d 163, 22 FEP

Cases 768 (5th Cir. 1980) (holding that a prima facie case is subject to independent review).

Additionally, there is a split in the circuits whether a distinction is to be made between subsidiary facts and ultimate facts, as is done in this circuit, or whether all factual findings are to be reviewed under the clearly erroneous standard. *Kunda v. Muhlenberg College*, 621 F.2d 532, 544, 22 FEP Cases 62 (3rd Cir. 1980) (even findings of ultimate fact are to be reviewed under the clearly erroneous standard).

This Court should issue a Writ of Certiorari not only to resolve the split in the circuits concerning the standard of review of the ultimate fact of discrimination but to insure uniformity in the application of Rule 52(a) and the role of the appellate court in determining subsidiary facts not dealt with by the district court.

III. The Fifth Circuit Erred By Affirming The District Court's Endorsement Of Totally Subjective Selection Methods And Word Of Mouth Recruiting For Faculty Positions By Distinguishing Controlling Precedents Of This Court And Of The Court Below As Being Inapplicable To Plaintiffs' Cause Of Action In That Plaintiffs' Claims Are Based On Sex Discrimination Rather Than Race Discrimination.

Plaintiffs contend women are disproportionately excluded from faculty appointments due to the U of H's word of mouth recruiting and "whom you know" hiring. The district court held that "standardless, arbitrary, and 'cliquish' " hiring is a way of life in academia with no actionable impact and also approved U of H's highly subjective procedure for promotion as "a necessary, indispensable, and bona fide means for determining promotion in the academic field." However, highly subjective selection procedures have consistently come under judicial fire

as ready mechanisms for discriminatory practices. *Johnson v. Uncle Ben's, Inc.*, 628 F.2d 419 (5th Cir. 1980), *vacated and remanded on other grounds*, ____U.S.____, 68 L.Ed.2d 290 (1981), *opinion on remand*, 657 F.2d 750 (5th Cir. 1981); *James v. Stockham Valves & Fittings Co.*, 559 F.2d 310 (5th Cir. 1977), *cert. denied*, 434 U.S. 1034 (1978); *Rowe v. General Motors Corp.*, 457 F.2d 348, 359 (5th Cir. 1979).

Despite the strong precedent to the contrary, the panel's decision upholds both the Defendants' standardless word of mouth recruiting techniques and their subjective promotion policies. In doing so, the panel attempts to distinguish *United States v. Georgia Power Co.*, 474 F.2d 906 (5th Cir. 1973). The panel's justification for ignoring *Georgia Power* and its progeny are contrary to the statutory intent of Title VII and conflict with precedents of this Court and of the court below. The panel holds first that in *Georgia Power* all of the employer's recruiting was done by word of mouth. In contrast, U of H at least goes through the motions of advertising most of its positions. The panel reasons that since the only remedy applied in *Georgia Power* was to require the employer to advertise its positions, U of H's procedure for advertising is all that is required. This conclusion ignores the fact that such advertising is frequently a meaningless attempt to give the appearance of compliance with affirmative action safeguards.[7]

The panel's second attempted distinction is that *Georgia Power* and its progeny were all race discrimination cases as opposed to sex discrimination cases. The court found this distinction significant because:

---

7. Of course, it is axiomatic that ineffective affirmative action programs do not relieve an employer of liability under Title VII. *Scott v. City of Anniston, Alabama*, 597 F.2d 897, 900 (5th Cir. 1979).

> [T]he obstacle of wide-spread segregation faced by potential black employees in those cases is not present for women seeking university faculty positions due to the fact that for the most part women are and have been educated at the same institutions and by the same professors as their male counterparts.

654 F.2d at 400.[8] The fallacy of the panel's rationale is clear from this Court's holding in *Frontiero v. Richardson*, 411 U.S. 677 (1973), that:

> There can be no doubt that our Nation has had a long and unfortunate history of sex discrimination. Traditionally, such discrimination was rationalized by an attitude of "romantic paternalism" which, in practical effect, put women, not on a pedestal, but in a cage.
>
> * * *
>
> It is true, of course, that the position of women in America has improved markedly in recent decades. Nevertheless, it can hardly be doubted that, in part because of the high visibility of the sex characteristic, women stil face pervasive, although at times more subtle, discrimination *in our educational institutions*, in the job market and, perhaps most conspicuously, in the political arena. [Emphasis added.]

411 U.S. at 685-86.

Under applicable case law where a minority group member has demonstrated a disproportionate underrepresentation in a substantial work force, and also demonstrates the utilization of word of mouth hiring and subjective promotion policies, the burden of justifying such adverse impact shifts to the Defendant to articulate a

---

8. The only evidence in the record concerning women's access to educational institutions is contained within the testimony of Dr. Margie McCorquodale wherein the witness testified contrary to the panel's gratuitous finding that women have had equal access to higher education.

business necessity for maintaining the questioned policies. *Fisher v. Proctor & Gamble Mfg. Co.*, 613 F.2d 524 (5th Cir. 1980); *Crawford v. Western Electric Co., Inc.*, 614 F.2d 1300 (5th Cir. 1980); *James v. Stockham Valves & Fittings Co., supra.* The U of H offered no justification for its policies. Indeed, in view of the fact that the policies utilized were contrary to the University's rules and regulations, Defendants could not reasonably justify such policies. Women are as entitled to the protections of Title VII as are any other protected group. The panel's decision to the contrary is a significant and unwarranted departure from the statutory intent of Title VII and prior case law and should be addressed and remedied by this Court.

CONCLUSION

For the reasons stated above, the Cross-Petition for Writ of Certiorari should be granted.

Respectfully submitted,

NELKIN & NELKIN

By: _____

STUART M. NELKIN
CAROL NELKIN
5417 Chaucer
P. O. Box 25303
Houston, Texas 77265
(713) 526-4500

ATTORNEYS FOR RESPONDENTS/CROSS-PETITIONERS

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Cross-Petition for Writ of Certiorari to the United States Court of Appeals for the Fifth Circuit was served upon Lonny F. Zwiener, Esq., Assistant Attorney General, P. O. Box 12548, Capitol Station, Austin, Texas 78711, by United States certified mail, return receipt requested, postage prepaid, on this _____ day of April, 1982.

STUART M. NELKIN

Appendix

APPENDIX

1. Memorandum Opinion of the District Court
2. Final Judgment of District Court
3. Original Opinion of Court of Civil Appeals for the Fifth Circuit
4. Opinion of the Court of Appeals Denying Motion for Rehearing
5. Judgment of Court of Appeals
6. Data from Plaintiff's Exhibit 39E

JEANNINE W. WILKINS, ET AL.,
Plaintiffs-Appellees,

V.

UNIVERSITY OF HOUSTON, ET AL.,
Defendants, Appellants.

United States District Court, S. D. Texas
Houston Division

(JUNE 13, 1979)

Plaintiffs brought civil rights action alleging that university and television station engaged in sex discrimination in employment practices. The District Court, Sterling, J., held that: (1) evidence established that defendant university did not discriminate against women in hiring, promotion, job assignment, salary, or any other employment practices; (2) evidence established that plaintiff employee of university was terminated for good cause, that sex was not a factor in such termination, that employee was not paid inequitably on the basis of sex, and that employee was not a subject of retaliation because of the filing of her claim with the Equal Employment Opportunity Commission; and (3) evidence established that sex was not a factor in employment decisions and practices regarding plaintiff employee of television station.

Plaintiff ordered to take nothing from defendants.

Evidence in civil rights action established that defendant university did not discriminate against women in hiring, promotion, job assignment, salary, or any other employment practices. Civil Rights Act of 1964, § 701 et seq., 42 U.S.C.A. § 2000e et seq.

Evidence in civil rights action established that plaintiff employee of university was terminated for good cause, that sex was not a factor in such termination, that employee was not paid inequitably on the basis of sex, and that employee was not a subject of retaliation because of the filing of her claim with the Equal Employment Opportunity Commission. Civil Rights Act of 1964, § 701 et seq., 42 U.S.C.A. § 2000e et seq.

Evidence in civil rights action established that sex was not a factor in employment decisions and practices regarding plaintiff employee of television station. Civil Rights Act of 1964, § 701 et seq., 42 U.S.C.A. § 2000e et seq.

Nelkin & Nelkin, Carol Nelkin, Houston, Tex., for plaintiffs.

Lonny F. Zweiner, Asst. Atty. Gen. of Texas, Austin, Tex., for defendants.

MEMORANDUM

STERLING, District Judge.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Plaintiffs, Jeannine Wilkins and Sharon Hill, brought this civil action individually and on behalf of all female, past, present and future faculty and professional and administrative employees of Defendants, the University of Houston (University) and KUHT-TV (KUHT), seeking redress against Defendants for alleged violations of Title VII, 42 U.S.C. § 2000e et seq., Art. I, Section 3a of the Texas Constitution, and the Equal Pay Act, 29 U.S.C. § 201 et seq., on the basis of sex discrimination in employment practices. Plaintiffs contend that the De-

fendants discriminated against women with regard to hiring, job assignments, promotions and wages. The case was tried before the court from June 20, 1978, until July 3, 1978. A third named Plaintiff, Tricia Burrett, could not be located at the time of trial and was dismissed from the case. The court, having considered the evidence, enters the following findings of fact and conclusions of law.

FINDINGS OF FACT

The Class Claims

[1] 1. The Defendants' policies, practices, customs and usages since 1972 have not discriminated against women with regard to hiring, job assignments, promotions, wages and other terms of employment.

2. Plaintiffs through their statistical analysis (Plaintiffs' Exhibits 39A–F, 41) have failed to prove by a preponderance of the evidence that Defendants' employment practices provide disparate treatment to men and women faculty members. The crucial failure in Plaintiffs' case as to hiring is in the showing of availability of qualified women for particular job assignments. No credible showing was made that qualified women were available to be hired into the technical schools of the University such as the engineering, natural science and law schools that were shown in Plaintiffs' Exhibit 37 as lacking in female full-time faculty members. Although the past paucity of women in the various departments indicated in Plaintiffs' Exhibit 37 presents a prima facie case, the court is convinced by the Defendants' evidence that such low numbers of women were due to the lack of women available and qualified in the national market place for such positions.

3. Plaintiffs' evidence as to the University's recruitment policies falls far short of proving a pattern of

discrimination. Although the proof indicates some hiring of applicants who are personally known by faculty members and recruiting committees, there is no evidence that women "that are known" are excluded from consideration because of their sex. Plaintiffs' accusation that University's hiring is standardless, arbitrary, and "cliquish" constitutes a complaint against the nature of the academic community, but does not prove sex discrimination in the University's hiring policies. The proof indicated that recruiting was done on a nationwide basis, and that positions were advertised and applicants were interviewed in a manner devoid of any sexual discrimination.

4. With regard to promotions, the court heard lengthy testimony as to the University's practices in promoting faculty from an entry level position of an untenured assistant professor on up the academic hierarchy. The court finds that the decision making on tenure and promotion is indeed based on highly subjective qualifications, but cannot condemn the practice as discriminatory in result. The University is unlike an industrial plant where more precise qualifications for promotion can be distinguished, consolidated, and put into print. The court finds no such discrimination in the Defendants' promotion practices and policies, and finds that a subjective procedure for promotion is a necessary, indispensable, and bona fide means for determining promotion in the academic field.

5. The court finds that any variations in salary among faculty men and women were due to market place values imposed upon the various schools of the University. Since the economic considerations mandated higher salaries for the faculty members of the largely male technical and professional schools, there naturally arose a salary differential from the more prevalently female educational, humanities and fine arts, and social sciences schools of the University. These economic forces

were the cause of a collective wage differential shown by Plaintiffs' statistics between the men and women faculty in different schools of the University. No reliable showing was made of wage differentials between men and women faculty within a particular school of the University, nor for any particular men or women performing the same academic duties and holding the same academic rank. The court is not persuaded that women faculty members with the same qualifications as their male colleagues were being paid less in salary. The amorphous qualifications of academia make indefinite distinguishing marks, but considering department, rank, degrees, teaching experience and empirical experience there has been no proof of sexual discrimination in compensation at the University.

6. With regard to the professionals and administrators encompassed in the class, the court is persuaded that the pay plan structure implemented by the professional and administrative task force committee eradicated any possible sex discrimination in salary and promotion among University professionals and administrators. The court finds that red circling or green circling employees who are above or below pay quartile divisions was not extensive, and was resolved by proper job level adjustment without discriminating against women. Plaintiffs' contention that women professionals and administrators are disproportionately placed in lower job categories is not justified by the evidence presented. Moreover, the failure to demonstrate convincingly the availability of women to fill more or higher professional and administrative positions militates against the finding of discrimination.

7. This court finds that the Defendants progressively hired and promoted more women from 1972 until the present, as their availability and qualifications increased. Any disproportion indicated by Plaintiffs' equivocal statistics exists because of economic factors

in the market place and not because of any discrimination on the part of the Defendants. The court finds that the Defendants did not discriminate against the class of women in hiring, promotion, job assignment, salary, or any other employment practices.

The Individual Claim of Plaintiff Hill

[2] 8. Plaintiff, Sharon Hill, was initially employed by the University in 1969 as a clerk-typist in the Economics Department. In September, 1970, she transferred to the University Computing Center in the position of secretary. In August, 1973, she became a Research Assistant. In January, 1974, Plaintiff Hill's job was reclassified as Coordinator of Operations with a beginning salary of $9,120. Over the next year, Plaintiff was given additional raises and in February, 1975, was earning $10,881.90 per year. Dr. R. L. Motard, Ms. Hill's supervisor, felt that Ms. Hill's responsibilities were more in line with that of a coordinator rather than a supervisory manager. Ms. Hill had notice of the title change by way of a personnel action request from the Personnel Department, a copy of which was sent to her. Ms. Hill was never told she had supervisory powers over anyone on the technical staff. To the contrary, as early as the summer of 1974, the testimony demonstrated that Dean Kirkpatrick, Dean of the College of Engineering, specifically told Ms. Hill that she had no managerial powers over Mr. David Lowell, Assistant Analyst. Moreover, in December, 1974, Dean Kirkpatrick issued an organizational chart in an attempt to set out in graphic form Ms. Hill's job responsibilities. The testimony of the key figures involved in the Engineering Department, including Dean Kirkpatrick, Dr. Motard, Dr. Donaghey, and Mr. Killough, clearly demonstrated that no one except Ms. Hill saw her job duties as anything other than coordinator, i.e., making sure deadlines were met, scheduling users of the computer and preparing budget reports. Ms. Hill, however, continued to con-

duct herself in a manner that assumed she had operational responsibility and control over the technical staff.

9. In November, 1974, the University of Houston hired Mr. Lewis Folkerth as a systems analyst to replace Mr. Lowell. Ms. Hill's duties were never substantially reduced, though modified upon the hiring of Mr. Folkerth. Mr. Folkerth was hired at a starting salary of $14,500. The testimony demonstrated that Ms. Hill had neither the experience nor the capability to work in Mr. Folkerth's position.

10. The evidence is clear that the market value and worth of the systems analyst, Lewis Folkerth, was considerably more than the market value of the coordinator of operations, Ms. Hill. Yet Ms. Hill persisted in seeking to be paid as much as Mr. Folkerth. Mr. Silber, the University salary adjuster, after a complete review of Ms. Hill's salary found that her job position and duties were not similar to Mr. Folkerth's. Mr. Silber did compare her salary to others with similar job responsibilities and found Ms. Hill to be entitled to a slight raise. Ms. Hill was notified that she would be entitled to a raise but she flatly refused to accept it since she felt that she was entitled to a salary comparable to Mr. Folkerth's. Shortly thereafter the working environment at the engineering computer laboratory became so hostile, due to Ms. Hill's belligerent attitude, that she was terminated.

11. Dr. Motard, upon returning from Europe in March, 1975, convened a meeting attended by Ms. Hill and Mr. Killough in order to help settle Ms. Hill's increasingly belligerent attitude. After the meeting, Dr. Motard, a long term friend and supporter of Ms. Hill, concluded that her attitude and ability to work with others had deteriorated to such an extent that Ms. Hill had to be terminated. Dean Kirkpatrick in an attempt fairly to view each side of the controversy requested from each engineer and from Ms. Sandy White, a woman

who had worked in the same office as Ms. Hill, an opinion as to the conflict. Everyone in the engineering computer laboratory, including Ms. White and Dr. Motard, both long term friends of Ms. Hill, felt that Ms. Hill should be terminated.

12. The evidence showed several reasons for Ms. Hill's termination. First, Ms. Hill's continuing insistence that Mr. Folkerth be fired. Second, Ms. Hill spent inordinate amounts of time on the telephone for non-business reasons and did not perform her job responsibilities adequately. Third, Ms. Hill could not communicate with and was inaccessible to the rest of the engineering computer laboratory team, often locking her door and refusing to see anyone. Fourth, Ms. Hill created and perpetuated a hostile attitude toward all members of the lab and made working conditions intolerable, so much so that Mr. Killough, an experienced and highly competent technical operator of the computer system, working on a voluntary basis, was driven to resignation.

13. The credible evidence demonstrated that Ms. Hill was terminated for good cause and that sex was not a factor in said termination. The court further finds that Ms. Hill was not paid inequitably on the basis of sex, and was not a subject of employer's retaliation because of the filing of EEOC claim.

The Individual Claim of Plaintiff Wilkins

[3] 14. Plaintiff, Jeannine Wilkins, was hired on a free-lance basis by KUHT in early August, 1973, and was paid $50 per day or $6.25 per hour for her work.

15. At that time KUHT had a full time editor, Arnold Bergene, who was preparing to retire effective September 1, 1973. Mr. Baeur, the Station Manager, informed Ms. Wilkins that the position would be open but that because of the small amount of film editing available,

Ms. Wilkins would be required to perform several other duties. Ms. Wilkins stated that she was interested in accomplishing assignments in research, writing, and television production, as well as the basic assignment of film editing.

16. Ms. Wilkins was hired on a full time basis in September, 1973, at a starting salary of $9,000. It must be noted that although her educational qualifications were adequate, she had little practical experience in film editing and in other areas of film and television work.

17. At the time Ms. Wilkins was hired, Mr. Bob Cozens was the producer-director of KUHT film unit. Mr. Cozens was her immediate supervisor during her employment at KUHT.

18. In the latter part of September, 1973, the film unit began working on a mass transit film which was to be broadcast in October. Ms. Wilkins adequately edited all but about 3% of the film. Mr. Cozens sought aid on a particularly difficult thirty-second section of the film from Mr. Bryan Beasley, a previous co-worker film editor of Mr. Cozens with a great deal of experience in film editing. The evidence demonstrated that Mr. Cozens requested Mr. Beasley's aid not due to any form of discrimination against Ms. Wilkins or anyone else. Mr. Beasley's services were engaged on the mass transit film because:

(1) Mr. Beasley freely volunteered his time and efforts for no pay;

(2) The film cutting was particularly difficult and Mr. Cozens did not feel Ms. Wilkins had the capability to perform the task;

(3) The film had a two week deadline; and

(4) Ms. Wilkins was busy working on other parts of the film.

19. Mr. Beasley did not again work at KUHT until March, 1974. Between September 20, 1973, and March 17, 1974, some of the programs on which Ms. Wilkins worked were:

(1) The Killers, November through January—film editor;

(2) Space Proposals—October through January—writing proposals;

(3) Texas history proposal, December through February—writing proposal;

(4) Human realities, December through January—production assistant;

(5) Shell Oil, January through February—film editor;

(6) Noticias—news in Spanish—February to May—film editor; and

(7) Signing with Cindy—February to mid-March—associate producer.

It is clear from the projects to which Ms. Wilkins was assigned, that Mr. Cozens was giving her an opportunity to work in various areas of film and television.

20. As early as January, 1974, Ms. Wilkins indicated to Mr. Cozens that she was dissatisfied with her salary and looking for another job. This was approximately 2½ months before Mr. Beasley was hired at KUHT.

21. In February, 1974, production both in the film and television departments increased. Preparation for the television auction, the most important event of the year for KUHT, was beginning. Ms. Wilkins was needed to work on this project. In mid-March the film unit began working on the Rice film production. Ms. Wilkins was the writer and production manager of that particular film.

22. On March 17, 1974, Mr. Beasley was hired as a free-lance film editor at a rate of $45.45 per day or $5.58 per hour, less than the free-lance rate of Ms. Wilkins in August of the previous year. The evidence demonstrated several reasons for hiring Mr. Beasley. Ms. Wilkins was needed to work on the auction; Mr. Beasley had far superior qualifications in film editing; and Ms. Wilkins was actively seeking other employment at that time, thus causing Mr. Cozens to look for another film editor as a replacement.

23. The evidence was clear that Mr. Cozens did not discharge another employee and assign her duties to Ms. Wilkins, but rather reinstated that same employee in the same job a few days later.

24. Although Ms. Wilkins resigned in mid-April, she continued to work at the station until July 31, 1974. During that time she was engaged in various important projects for the station, which aided her in obtaining a better and higher paying job at North Texas State University at Denton, Texas. The evidence demonstrated that Ms. Wilkins is now teaching classes at North Texas State in other areas of film and television, as well as film editing.

25. The court finds that sex was not a factor in KUHT employment decisions and practices regarding Ms. Wilkins.

CONCLUSIONS OF LAW

1. The court has jurisdiction of this action and jurisdiction and venue over the parties under federal statutory and pendent jurisdiction principles.

2. This action was and is properly certified as a class action pursuant to Fed.R.Civ.P. 23(a) and (b)(2).

3. The employment practices of the Defendants with regard to the named Plaintiffs and the members of the class, delineated in the court's findings of fact, do not constitute unlawful employment practices in violation of Title VII on the basis of sex, nor do they constitute unlawful retaliation in violation of 42 U.S.C. § 2000e-3(a); nor do they constitute a maintenance of unlawful wage differentials in violation of the Equal Pay Act, 29 U.S.C. § 216; nor do they constitute an unlawful sex discrimination in violation of the Texas Constitution.

5. Therefore Plaintiffs Sharon Hill, Jeannine Wilkins and the members of the class certified will take nothing from the Defendants, and will be taxed with costs of court.

All findings of fact more properly denominated as conclusions of law are hereby adopted as such. All conclusions of law more properly denominated as findings of fact are hereby adopted as such.

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

JEANNINE W. WILKINS, ET AL.	)(	
	)(	
	)(	**CIVIL ACTION**
V.	)(	**NO. 75-H-644**
	)(	
UNIVERSITY OF HOUSTON, ET AL.	)(	

FINAL JUDGMENT

This action came on for trial before the Court, and the issues having been duly tried and a decision having been duly rendered,

It is ORDERED and ADJUDGED

that the Plaintiffs take nothing, that the action be dismissed on the merits, and that the Defendants recover of the Plaintiffs their costs of action.

DONE at Houston, Texas, this 15th day of June, 1979.

/s/ Ron N. Sterling
United States District Judge

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT
UNIT A

No. 79-2817

Jeannine W. WILKINS and Sharon D. Hill, et al.,
Plaintiffs-Appellants,

V.

The UNIVERSITY OF HOUSTON, et al.,
Defendants-Appellees.

Rehearing and Rehearing En Banc Denied Dec. 7, 1981.
See 662 F.2d 1156.

(AUGUST 28, 1981)

Plaintiffs brought civil rights action alleging that university and television station engaged in sex discrimination in employment practices. The United States District Court for the Southern District of Texas, Ross N. Sterling, J., 471 F.Supp. 1054, entered judgment in favor of defendants. Appeal was taken. The Court of Appeals, Gee, Circuit Judge, held that: (1) plaintiff film editor failed to establish prima facie case of discrimination on part of television station; (2) woman computer lab worker failed to establish discrimination; (3) class plaintiffs failed to establish discrimination in faculty hiring, faculty recruiting, in faculty promotion and in faculty compensation; (3) plaintiffs failed to establish discrimination against professional and administrative position in compensation; (4) plaintiffs established prima facie case of discrimination against women through compensation of academic positions of professional and administrative staff; and (5) plaintiffs failed to establish that

university discriminated against its professional and administrative women employees by hiring them only for lower level positions and by not promoting them to more responsible, higher paying jobs.

Affirmed in part, reversed and remanded in part.

Ultimate fact at issue in Title VII action is whether defendant unlawfully discriminated against plaintiff, which finding is not subject to clearly erroneous standard of review; rather, reviewing court must make independent determination of ultimate fact issue of discrimination and in doing so the appellate court is bound by the trial court's findings of subsidiary facts that are not clearly erroneous. Civil Rights Act of 1964, § 701 et seq., 42 U.S.C.A. § 2000e et seq.

Plaintiff film editor was not constructively discharged, although a different film editor was used to work on several of television station's films, in light of fact that different film editor had considerably more experience and skill than plaintiff, and employer's decision to use best possible people on a particular film was reflected in his hiring a free-lance cameraman to shoot the film rather than using the station's male staff cameraman and in light of fact that at one point the plaintiff had told her employer that her salary was too low and soon thereafter began interviewing for other employment indicating a reason other than sexual discrimination for her decision to quit. Civil Rights Act of 1964, § 701 et seq., 42 U.S.C.A. § 2000e et seq.

Plaintiff computer lab worker was not terminated because of her sex or in retaliation for her having filed a charge with the EEOC complaining of a salary differential in light of fact that individual receiving a higher salary had a degree in electrical engineering and one or two years' experience with computers in the industry, the plaintiff lacked the technical competence to develop

and maintain computer systems that were to assist users in programming and her duties were primarily administrative in nature and reasons for terminating plaintiff included her spending inordinate amounts of time on telephone for nonbusiness reasons, her spending most of her time in office with door shut and often locked making it difficult to communicate with her, and her becoming belligerent and hostile toward co-workers in lab.

Women plaintiffs failed to establish by their statistical evidence a prima facie case of discrimination with respect to faculty hiring decisions made by the university during certain years in light of fact that amount of hiring done by particular colleges within university was not considered, instructor and assistant professor versus associate and full professor distinction was ignored even though new associate and full professors accounted for more than one third of new faculty members hired during period in question, the availability data included all college university teachers without regard to whether the teachers held doctoral degrees while the university required an advanced degree of its faculty members and plaintiffs introduced evidence of only one specific instance in which woman arguably was discriminated against with respect to faculty position which was persuasively rebutted by the university.

Plaintiffs failed to establish that word-of-mouth recruiting of faculty persons operated to isolate women from the web of information surrounding job opportunities at the university or that such a system operated as a built-in headwind to women seeking faculty positions at the university; thus, the plaintiffs failed to establish discrimination resulting from this type of recruitment.

Plaintiffs' scanty evidence of specific instances of discriminatory promotion decisions by university was insufficient to meet burden of establishing by preponder-

ance of evidence that sex discrimination was university's standard operating procedure particularly since there was no statistical evidence that essentially demonstrated only that percentage of assistant, associate, and full professors who were women remained relatively constant during period in question while percentage of instructors who were women increased substantially and there was no evidence as to number of men and women who were eligible for and denied tenure during the years in question and no evidence as to average length of time men and women served in each rank before being promoted to next one.

Plaintiffs' statistical evidence was insufficient to establish that university discriminated against women through compensation paid in light of fact that plaintiffs' statistical evidence failed to take into account fact that number of factors operated simultaneously to influence amount of salary a faculty member received and university's multiple regression analyses were ambiguous and insufficient to prove the plaintiffs' claim.

Evidence in civil rights action failed to establish by preponderance of evidence that university engaged in pattern or practice of discriminating against its professional and administrative women employees in compensating them.

Evidence in civil rights action established claim that university discriminated against academic women employees in compensating them.

Where special qualifications are required for a particular job, plaintiffs asserting discriminatory hiring claim must demonstrate availability of qualified class members to give their statistical showing meaning.

Plaintiffs failed to establish that university discriminated against professional and administrative women

employees by hiring them only for lower level positions and by not promoting them to more responsible, higher paying jobs in the absence of evidence as to the number of men and women with qualifications available for the positions.

Carol Nelkin, Houston, Tex., for plaintiffs-appellants.

Lonny Zwiener, Asst. Atty. Gen., Austin, Tex., for defendants-appellees.

Appeal from the United States District Court for the Southern District of Texas.

Before BROWN, COLEMAN and GEE, Circuit Judges.

GEE, Circuit Judge:

Jeannine Wilkins and Sharon Hill, employees of the University of Houston, brought this Title VII[1] suit against the university and KUHT-TV on behalf of themselves and a class of women, alleging that the university discriminated against women in a variety of its employment practices. The class certified by the district court included all past, present, and future female employees on the faculty or in a professional or administrative staff position, as well as unsuccessful female applicants for such employment.[2] After a trial on the merits, the district court rendered judgment for the university on both the individual and class claims. As to the claim that the university discriminated against its women employees in the academic division of the professional and administrative staff with respect to compensation, we reverse the district court's judgment for the defendants. 471 F. Supp. 1054. In all other respects, we affirm.

I.

STANDARD OF REVIEW

[1] The standard by which we review a factual finding of a district court depends upon whether the finding at issue is one of ultimate fact or subsidiary fact. The ultimate fact at issue in a Title VII action is whether the defendant unlawfully discriminated against the plaintiff. That finding is not subject to the clearly erroneous standard of review; rather, the reviewing court must make an independent determination of the ultimate fact issue of discrimination. In doing so, however, the appellate court is bound by the trial court's findings of subsidiary facts that are not clearly erroneous. *Danner v. United States Civil Service Commission*, 635 F.2d 427 (5th Cir. 1981).

II.

INDIVIDUAL CLAIMS

A. *Jeanine Wilkins.*

[2] Ms. Wilkins was employed by KUHT-TV ("KUHT"), an auxiliary enterprise of the University of Houston, in August of 1973. In April of 1974, Ms. Wilkins notified the university that she was terminating her employment effective July 31, 1974. Plaintiff Wilkins claims that she was constructively discharged by defendants in violation of her Title VII rights. As we recently reiterated, a "[c]onstructive discharge occurs when the employer deliberately makes an employee's working conditions so intolerable that the employee is forced into an involuntary resignation." *Pittman v. Hattiesburg Municipal Separate School District*, 644 F.2d 1071, 1077 (5th Cir. 1981). The question is not whether the employer's purpose was to force the employee to resign; rather, the issue is whether "a reasonable person

in the employee's position and circumstances would have felt compelled to resign." *Id.* It is clear from our review of the record that Ms. Wilkins was not constructively discharged by sexually discriminatory employment practices committed by defendants.

When Ms. Wilkins was hired, the film production unit at KUHT had been virtually shut down for more than a year, and efforts were underway to revitalize the department. This situation, and the small size of the station's film operation, dictated that employees of the department perform a variety of tasks. While Ms. Wilkins replaced the station's only film editor, it is undisputed that there was not nearly enough film editing to be done to justify the employment of a full-time film editor and that her duties were to extend considerably beyond merely editing films. In fact, both Jim Bauer, the station manager, and Bob Cousins, a producer-director at KUHT and Ms. Wilkins' immediate supervisor, testified that Ms. Wilkins expressed a strong desire to engage in a wide variety of activities at the station and that their decision to hire her was based in part on that desire.

Shortly after Ms. Wilkins was hired, the film unit began working on a mass transit film with a rather short deadline entitled "Getting There." While plaintiff testified that she did not edit the major portion of this film, the trial court found on the basis of substantial evidence that she edited some 97 percent of it. The remaining segment of the film was edited by a Mr. Brian Beasley, a film editor who had worked with Mr. Cousins on other films not related to KUHT. This 3 percent segment involved cutting the film to music, a process that is somewhat more difficult than the typical editing of film. Beasley, who had more than ten years' experience as a film editor and who was then employed elsewhere, edited the film on a Saturday on a voluntary, noncompensatory basis apparently as a favor to Cousins.

The mass transit film was finished in late September or early October 1973. From that date until at least the following January, Beasley was completely uninvolved with KUHT. According to Ms. Wilkins, she learned in January 1974 that Beasley was going to be hired on a free-lance basis to edit a film the station was going to make for Rice University later in the spring. Plaintiff testified that the station's decision to use Beasley on the Rice film—conceded by all to be the most important project that had come into the film production unit—was a major factor in her decision to terminate her employment at KUHT. Her Title VII claim is that Cousins could not accept women working with him in positions of authority; that this attitude was reflected not only in the decision to use Beasley on the Rice film but also in the fact that Cousins assigned various clerical, routine, and relatively menial tasks to Wilkins; and that this situation made working conditions so intolerable that Wilkins was forced into an involuntary resignation. We reject this argument for a number of reasons.

First, it is clear that Beasley had considerably more experience and skill as a film editor than did Wilkins. Cousins testified that Beasley had been editing films for some twenty to twenty-two years and that he (Cousins) considered Beasley "probably the best film editor in Houston and the southwest." Cousins and Beasley had worked together on films for the National Aeronautics and Space Administration; from that experience Cousins had developed "every confidence" in Beasley as a film editor. Producing and directing films is a creative process the ultimate success of which is highly dependent upon the work of the film editor, with whom the producer-director must work closely. Cousins testified that his decision to hire Beasley to edit the Rice film was based on his belief that Beasley was an excellent editor and his desire to make certain that the very important Rice film was produced and edited properly. While Cousins stated that Wilkins had competently edited the

other films to which she had been assigned, he also testified that her limited experience editing films—prior to coming to KUHT Wilkins had one year of film experience in which she had edited two films—was a factor in his decision to hire Beasley for the Rice film. Cousins' decision to use the best possible people on the Rice film was also reflected in his hiring a free-lance cameraman to shoot the film rather than using the station's male staff cameraman. We agree with the district judge's finding that Cousins' decision to hire Beasley to edit the Rice film, rather than using Wilkins, was not sexually discriminatory.

Other factors supporting our decision that Wilkins was not constructively discharged include the following: Wilkins was hired to perform a variety of tasks other than editing films. While she testified that she edited, partially or wholly, at least seven films, the evidence also indicates that she was involved in researching film ideas, writing proposals, producing a film, and assisting in the production of several other films. At the time the Rice film was being produced, KUHT was involved in its annual auction from which it derived a major portion of its operating funds for the next year. Wilkins was assigned to produce and edit a number of short commercial films for the auction. While the Rice film may have been the station's most important film project from a creative standpoint, the auction generated more than forty times as much revenue for the station than did the Rice film. Finally, we note that near the beginning of 1974 Ms. Wilkins told Cousins that her salary was too low; soon thereafter she began interviewing for other employment. As there is no serious contention that Wilkins was discriminated against with respect to pay, the effect of her dissatisfaction with her salary on her decision to resign indicates a reason other than sexual discrimination for that decision. Our review of the record indicates that Wilkins was assigned a variety of tasks of varying degrees of importance and difficulty at

KUHT and that sexually discriminatory practices committed by the station, if any, did not make her working conditions so intolerable as to force her into an involuntary resignation.

B. *Sharon Hill*

In late 1973, Ms. Hill worked for the university in a computer laboratory that serviced the College of Engineering by providing computer programming and access to computers primarily to faculty and students within the college. At that time David Lowell was the lab employee with technical proficiency in the computer services offered by the lab. Ms. Hill's duties involved such tasks as scheduling users' access to the computers, billing, budgeting, hiring and supervising student computer operators, and ordering supplies; the extent of her supervisory authority over Lowell is the subject of some dispute and is discussed below. In late 1973, Ms. Hill formally requested that her job be reclassified and that she be given a raise. At that time her job title was research assistant, and she was earning $7,878 per year. Her application was approved: effective January 1, 1974, her annual salary was raised to $9,120, and she was given the title coordinator of operations.[3]

In the fall of 1974, Lowell left the lab and was replaced on a temporary basis by David Killough, who was then a full-time employee of Exxon. Killough, on the verge of retirement and seeking part-time computer-related work, agreed to fill the vacancy left by Lowell on a voluntary, noncompensatory basis until a permanent replacement could be found and trained. That replacement was an electrical engineer named Lew Folkerth; he was hired by the university in November of 1974 at an annual salary of $14,500. Problems between Hill and Folkerth arose immediately; before Folkerth arrived for his first day at the lab, Hill notified the university's equal employment officer that the situation with

Folkerth created a "glaring inequity" because Folkerth, whom she assumed would be under her supervision, would be paid some $5,000 per year more than she was being paid. Shortly thereafter—before Hill's complaint had been processed by the university—she filed a formal charge with the Equal Employment Opportunity Commission alleging that the salary differential was attributable to sex discrimination.

The university responded to Hill's complaint by having a representative of the personnel office, Mr. Silber, investigate the charge by "auditing" Hill's job. Silber visited the lab, watched it in operation, and had a discussion with Hill concerning her duties. He concluded that her job was a relatively low level administrative position; that it could not be compared with managerial positions at the university's other two computer facilities because those positions required technical skill and the administrative management of a much larger operation; that Folkerth's technical computer competence justified his higher salary; but based on salaries being paid to other administrative personnel, Ms. Hill should be given a raise to $10,750 or $11,000 per year. While Hill testified that the dean refused to approve her raise, the district court found—consistent with computer printouts introduced by plaintiff listing employees and their salaries—that in February of 1975, just one month after Silber's job audit and recommendation, Hill was being paid at an annual rate of more than $10,800.

Meanwhile, the working relationships between Hill on the one hand and Killough and Folkerth on the other were deteriorating. The prime sources of these problems were apparently a difference in opinion between the three concerning Hill's supervisory authority over Folkerth and a personality conflict between Hill-and Folkerth. On several occasions Hill's attempts to exercise supervisory powers over Folkerth were ignored by him, exacerbating the problem. The situation continued

to deteriorate until it became evident that Killough, and probably Folkerth, would quit if Hill was not fired. After discussing the problem with the lab personnel, Dean Kirkpatrick fired Hill; that decision resulted in this lawsuit. The district court found that sex was not a factor with respect to either Hill's termination or her salary and that the university had not terminated her in retaliation for her filing a charge with the EEOC. We agree.

Hill's salary claim is disposed of easily. Folkerth had a degree in electrical engineering and one or two years'—the testimony was inconsistent—experience with computers in industry. Uncontroverted testimony established that his $14,500 annual salary was below market value for persons with his qualifications. Hill had taken one IBM course covering a wide range of topics relating to computers; while she apparently had some understanding of computer languages, it is undisputed that she lacked the technical competence to develop and maintain computer systems or to assist users in programming. Her duties were administrative in nature; on the basis of the personnel department's job audit, a recommendation was made that Hill's salary be raised to $10,750 or $11,000. The district court found on the basis of credible evidence that just one month after this recommendation Hill was making more than $10,800 per year.

[3] The issues of whether Hill was terminated because of her sex or in retaliation for her having filed a charge with the EEOC will be considered together. Hill claims that after she filed the EEOC charge she was demoted and ultimately fired. While the university argues strenuously that Hill was not demoted, it is clear that her duties changed when Lowell was replaced by Killough and Folkerth. The issue, however, is whether her duties were curtailed because of her sex or in retaliation for her having filed the EEOC charge; we agree with the district judge that they were not.

The fundamental problem appears to have been a difference in opinion between Hill and the others involved with the lab about the extent of Hill's supervisory authority. It is clear that Hill had supervisory authority over Lowell—Dr. Motard, the lab director, so testified, and an organizational chart for the lab and job descriptions for Hill's and Lowell's positions bear this out. When Lowell left and Killough and Folkerth arrived, Hill attempted to exercise supervisory authority over Folkerth; Dean Kirkpatrick responded to the resulting problem by issuing a new organizational chart that essentially provided that Killough was in charge of the technical side of the lab and thus was to be Folkerth's supervisor. Hill argues that this action was made in retaliation for her having filed the EEOC charge; while the new chart was issued only a month after Hill had filed the charge, we find that the dean did not do so with a retaliatory motive.

Dr. Motard and Dean Kirkpatrick testified that Lowell, who was in the process of completing his degree requirements, needed supervision in scheduling projects, meeting deadlines, not taking on too many outside projects, and staying within the budget. To this extent Hill was Lowell's supervisor; she did not supervise his systems development and programming work. Lowell's replacement, Killough, had many years of experience at Exxon in both the technical and managerial aspects of a computer operation; that he required no supervision is not contested. Rather, Hill's complaint goes to her position in the lab with respect to Folkerth. Defendants' argument is that Killough was in charge of the technical aspects of the lab; that it was reasonable for Killough to supervise Folkerth, whom Killough essentially was training to take Lowell's job; that Folkerth did not have the same difficulties as Lowell in administering his work load so that he simply did not need the kind of supervision that Hill exercised over Lowell; and that neither Hill's sex nor the EEOC charge had anything to do with

her "demotion." We find this argument entirely reasonable, supported by the evidence, and in fact largely uncontroverted by any.

While the source of the problem that led to Hill's termination appears to have been her dissatisfaction with her salary relative to Folkerth's and the misunderstanding as to her supervisory authority, the discontent in the lab manifested itself in a variety of ways. Communications between Folkerth and Hill apparently were strained from the date Folkerth was hired. While Killough apparently made efforts to mediate, his patience was limited; at a meeting between Dr. Motard, Hill, and Killough concerning Folkerth, Killough became very angry, stormed out of the meeting, and said that he had had enough and was quitting. At that point it was evident that a choice had to be made between Killough and perhaps Folkerth on the one hand and Hill on the other. For this and a number of other reasons, Dean Kirkpatrick decided to fire Hill. She spent inordinant amounts of time on the telephone for nonbusiness reasons; she had begun spending most of her time in her office with the door shut and often locked, making it difficult to communicate with her; she had become belligerent and hostile toward coworkers in the lab; and her position would be much easier to fill than would Killough's or Folkerth's.[4] In short, the trial court was correct in finding that "Ms. Hill was terminated for good cause . . . that sex was not a factor in said termination . . . and [that she] was not a subject of . . . retaliation because of the filing of an EEOC claim." 471 F.Supp. at 1058.

III.

CLASS CLAIMS

A. *Introduction.*

Plaintiffs Wilkins and Hill sued not only for themselves but also on behalf of a class consisting of all past, present, and future female employees on the faculty or in a professional or administrative staff position and unsuccessful female applications for such employment at the University of Houston. Initially, we note that, the class having been certified prior to trial, the district court's dismissal of the named plaintiffs' claims and our affirmance of that decision do not negate the need for consideration of the class claims. *Thurston v. Dekle*, 531 F.2d 1264, 1271 (5th Cir. 1976).

Plaintiffs essentially allege that the university treats women less favorably than men because of their sex; there is no claim that employment practices of the university that are facially neutral in their treatment of male and female employees fall more harshly on females than on males. Accordingly, plaintiffs have stated a "disparate treatment," as opposed to a "disparate impact," claim and must therefore prove discriminatory motive. *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 335 n.15, 97 S.Ct. 1843, 1854 n. 15, 52 L.Ed.2d 396 (1977); *Lee v. Conecuh County Board of Education*, 634 F.2d 959, 961 n.3 (5th Cir. 1981). Furthermore, plaintiffs' class claims, alleging that the university engaged in a systemwide pattern or practice of discriminating against women, cannot succeed on the basis of proof of "the mere occurrence of isolated or 'accidental' or sporadic discriminatory acts. [Rather, plaintiffs] had to establish by a preponderance of the evidence that [sex] discrimination was the [university's] standard operating procedure—the regular rather than the unusual practice." *Teamsters*, 431 U.S. at 336, 97 S.Ct. at 1855.

Plaintiffs introduced a substantial amount of statistical evidence in an attempt to meet their burden of proving that the university acted with a discriminatory motive and engaged in a pattern or practice of

discriminating against women.[5] In *Hazelwood School District v. United States*, 433 U.S. 299, 307-08, 97 S.Ct. 2736, 2741, 53 L.Ed.2d 768 (1977), also a Title VII disparate treatment class action, the Supreme Court did not discuss explicitly the discriminatory motive issue but stated that "[w]here gross statistical disparities can be shown, they alone may in a proper case constitute prima facie proof of a pattern or practice of discrimination." Accordingly, where the statistical showing is sufficiently strong in a disparate treatment action, plaintiffs' prima facie case can be made without additional evidence establishing that defendant purposefully treated minorities protected under Title VII less favorably than other persons.

Because of the significant role that statistics can play in discrimination cases and of their inherently slippery nature, it is imperative that they be used properly. While gross statistical disparities may alone establish a prima facie case of employment discrimination in a proper case, the Supreme Court has cautioned "that statistics are not irrefutable; they come in infinite variety and, like any other kind of evidence, they may be rebutted. In short, their usefulness depends on all of the surrounding facts and circumstances." *Teamsters*, 431 U.S. at 340, 97 S.Ct. at 1356-57.[6] (footnote omitted.)

B. *Faculty.*

The claims made on behalf of female faculty members challenge various employment practices engaged in by the university during the 1973 through 1978 school years.[7] In particular, plaintiffs allege that the university discriminated against women with respect to (1) hiring, (2) recruiting, (3) compensation, and (4) promotion. After full consideration of each claim, we conclude that plaintiffs have failed to establish a prima facie case of unlawful discrimination in regard to the application of any of the challenged practices to women.

1. *Hiring.*

[4] The statistical evidence in support of plaintiffs' faculty hiring claim was introduced in an attempt to establish that from 1973 through 1978 a significantly smaller number of women were hired to faculty positions than were available for hire.[8] The key components in this showing obviously are the number of women faculty members hired in the relevant time period and the number of women available for hire to such positions.[9] The seemingly simple and straightforward task of comparing the number of women hired with the number of women available is complicated by the fact that the availability component is to a significant extent dependent upon the subject matter field in which the faculty person is hired. Further, the number of available women qualified to hold faculty instructor or assistant professor positions may be significantly different from the number qualified to hold positions as associate or full professors, as the latter positions generally require a number of years of experience in teaching or research in addition to an advanced degree.

Plaintiffs' statistical evidence on the hiring claim does not reflect a consideration of the number of faculty persons hired by different colleges within the university. Similarly, with respect to the availability issue, no explicit attempt has been made to differentiate between the university's hiring of instructors and assistant professors on the one hand and associate and full professors on the other. The importance of the college or departmental factor is demonstrated by the fact that the number of doctorates granted to men in the physical sciences, engineering, and life sciences fields in 1977 was somewhat more than 10,000, while the number of such degrees granted to women in that year was just under 1,500. In contrast, in the social sciences, humanities, and education fields, men were granted approximately 12,400 doctorates in 1977, while women were granted

slightly over 8,000.[10] Obviously, if the bulk of the university's faculty hiring during the years in question were concentrated in the former fields one would expect that the proportion of men hired would have been substantially higher than the proportion hired had the bulk of faculty hiring been in the latter fields.

Depending upon the needs of the college within the university doing the hiring, faculty persons are hired as either instructors, assistant professors, associate professors, or full professors. While evidence at trial indicated that the majority of instructors at the University of Houston are graduate students at the university who are not considered permanent faculty members but are teaching on a part-time basis pending receipt of their advanced degrees, a substantial number of instructors are persons who are close to receiving their doctorates from another university and who will be given the rank of assistant professor upon receipt of these degrees. Positions occupied by the latter group of instructors and by the assistant professors are generally entry level positions open to recent graduates from other universities. By contrast, associate and full professorships are available only to persons with a number of years experience—usually in the academic world—subsequent to their receipt of an advanced degree. As plaintiffs have demonstrated, recent years have seen a rise in the proportion of doctorate recipients who are women; accordingly, it is evident that for the years in question the number of women available for hiring as instructors or assistant professors will be greater than the number available for hiring as full or associate professors.

With these considerations in mind, we turn to the evidence introduced by plaintiffs on their faculty hiring claim. The availability data supplied by plaintiffs is a Department of Labor publication indicating that the percentage of teachers employed in colleges and universities who were women was 28.3 in 1970 and 31.3 in

1976. By interpolating and extrapolating, percentages were derived for each of the years covered by this lawsuit. The appropriate percentage was then applied to the total number of faculty members hired in each year to get the "expected" number of women hired in each year, which was then compared with the actual number of women hired. From this analysis we learn that for the six years at issue the number of women we would expect to have been hired is 244, while the actual number of women hired was 164. A binomial distribution statistical analysis of this difference demonstrates that it is a statistically significant one. *See Castaneda v. Partida*, 430 U.S. 482, 496 n.17, 97 S.Ct. 1272, 1281 n. 17, 51 L.Ed.2d 498 (1977).

For a number of reasons, we decline to accept this showing as sufficient to establish a prima facie case of sex discrimination in faculty hiring. First, the amount of hiring done by particular colleges within the university was not considered. Second, the instructor and assistant professor versus associate and full professor distinction was ignored even though new associate and full professors accounted for more than one-third of the new faculty members hired during the six-year period. Further, plaintiffs' availability data includes all college and university teachers without regard to whether the teachers held doctoral degrees; as many junior colleges and community colleges employ teachers who do not have such advanced degrees, the data submitted by plaintiffs does not reflect the number of persons available for hire at the University of Houston, which requires an advanced degree of its faculty members.[11]

In addition, other evidence introduced by plaintiffs reveals that during the six-year period at issue, 26 percent of the 350 assistant professors and 37.5 percent of the 173 instructors hired by defendant were women. In light of the evidence that 30.4 percent of all doctorate recipients in 1977 who planned to teach were women, we

do not find a gross statistical disparity sufficient to make a prima facie case between the number of women hired by the defendant and the number defendant would have hired had its hiring of instructors and assistant professors mirrored the availability of women for such positions.[12]

Plaintiffs' hiring statistics for associate and full professors are more compelling. During the six-year period at issue, of the 154 associate professors hired only 5 were women; similarly, of 111 full professors hired, 3 were women. The impact of these statistics is lessened considerably by plaintiffs' failure to introduce data as to the availability of qualified women for these positions. As discussed, the only availability data presented by plaintiffs included teachers at junior colleges and community colleges, many of whom undoubtedly lacked doctorate degrees and the requisite experience and thus were not qualified for hire as an associate or full professor at the University of Houston. Further, the record does not reveal the extent of hiring within the various colleges of the university; as discussed, the availability of women for faculty positions is to a significant extent dependent upon whether the position is in a science-related field—where men currently predominate—or a humanities or social science field—in which qualified women are available in more proportionate numbers.[13]

Finally, we note that plaintiffs introduced evidence of only one specific instance in which a woman arguably was discriminated against with respect to a faculty position, and this instance was persuasively rebutted by defendants. While, as we have noted, gross statistical disparities may alone be sufficient to establish a prima facie case of discrimination in a proper case, the statistical disparities in this case, because of the problems with plaintiffs' availability data, are not sufficiently "gross" to satisfy plaintiffs' burden. The failure to introduce evidence of specific examples of discrimination in fac-

ulty hiring decisions in thus significant. *Cf. Teamsters*, 431 U.S. at 338–39, 97 S.Ct. at 1855–56 (evidence of 40 specific instances of discrimination introduced); *Hazelwood*, 433 U.S. at 304–06, 97 S.Ct. at 2739–41 (plaintiffs introduced evidence of 55 specific instances of discrimination, 16 of which were found by the court of appeals to be unrebutted by defendants). We conclude that plaintiffs have failed to establish a prima facie case of discrimination with respect to the faculty hiring decisions made by the university during the academic years from 1972–73 through 1977–78.

2. *Recruiting.*

[5] As stated in footnote seven, plaintiffs introduced evidence that on a number of occasions the university selected new faculty members by informal means rather than by the formal procedures established under the university's equal employment opportunity procedures. Plaintiffs' claim that new faculty members often were selected through operation of an "old boy network" by which exclusively male or male-dominated recruitment committees discriminated against women. In addition to the evidence that a number of faculty positions were filled the day the vacancy was announced, plaintiffs introduced evidence that in four of the six years at issue 47.8 percent of the faculty positions for which equal employment opportunity compliance data information was available were filled by men with no women even being considered for the job.

It is clear that with respect to a number of faculty positions filled during the six-year period the university engaged in informal, subjective recruiting and hiring practices. While a number of witnesses testified as to the formal, objective procedures designed for filling faculty positions, Dr. Lawless, associate chancellor at the university, candidly admitted that "if you are really trying to build an outstanding program, [you] identify a

top level individual and then try to recruit that top level individual." Relying on *United States v. Georgia Power Co.*, 474 F.2d 906 (5th Cir. 1973), plaintiffs argue that where word-of-mouth recruitment and preferential hiring of friends or relatives results in a disproportionate number of minorities being excluded from an employer's work force, such practices cannot stand. Finding *Georgia Power* distinguishable from the instant case, we decline to reverse the district court's judgment for defendants on the recruiting claim.

In *Georgia Power* substantially all of the employer's recruiting was accomplished by word of mouth or by interviewing at all-white, or predominantly all-white, educational institutions. With respect to word-of-mouth recruiting, we stated that "[u]nder word-of-mouth hiring practices, friends of current employees admittedly received the first word about job openings. Since most current employees are white, word-of-mouth hiring alone would tend to isolate blacks from the 'web of information' which flows around opportunities at the company." *Id.* at 925. Concluding that word-of-mouth recruiting and hiring operated as a "built-in headwind" to blacks and was not justified by business necessity, we nevertheless refused to enjoin such practices. Rather, we held that "[t]he built-in headwinds which the present Georgia Power system harbors must be offset by affirmative steps reasonably calculated to encourage black employment and to break through the currently circumscribed web of information." *Id.* at 926. While we declined to specify what affirmative steps the employer would have to take, we suggested that advertisements of openings in publications accessible to nearby black communities and public notice that the company was an equal opportunity employer be considered.

Here the university has an affirmative action plan; pursuant to that plan a substantial majority of vacancies for faculty positions are advertised nationally. That

some faculty positions are filled by word-of-mouth recruiting and hiring practices does not negate the fact that the formal procedures of advertising vacancies and considering all applicants—employed for the substantial majority of faculty vacancies—constitute affirmative steps reasonably calculated to encourage the employment of women. Further, of the faculty positions filled on the same day the vacancy was announced or soon thereafter, we are not told the proportions of men and women hired. Thus, it is possible that substantial numbers of women were hired as a result of word-of-mouth recruiting. In addition, the same availability question discussed with respect to the hiring claim is present here: plaintiffs' evidence of jobs being filled by men when no women were considered does not indicate which jobs were filled in this manner or whether women were available for such positions. As there is no showing that these jobs were the same ones filled by word-of-mouth recruiting, the possibility that women were not considered for a number of jobs because they did not apply for them is a significant one.

Finally, we note that *Georgia Power* and its progeny were all racial discrimination cases. We find this significant because the obstacle of widespread segregation faced by potential black employees in those cases is not present for women seeking university faculty positions due to the fact that for the most part women are and have been educated at the same institutions and by the same professors as their male counterparts. In short, we decline to assume that word-of-mouth recruiting of faculty persons operates to isolate women from the web of information surrounding job opportunities at the University of Houston, and there has been no showing that it operates as a built-in headwind to women seeking faculty positions at the university.

3. *Promotion.*

[6] Plaintiffs claim that the university discriminated against women in its promotion and tenure decisions. Evidence offered in support of this claim included testimony that one woman was granted tenure but denied the promotion to associate professor that usually accompanies the grant of tenure. In another instance, a woman was finally granted tenure after having been employed as an instructor "far beyond the time" at which she should either have been terminated or granted tenure. The only evidence offered of class-wide discrimination with respect to promotion and tenure were statistics comparing the percentage of instructors, assistant professors, associate professors, and full professors who were women over the six-year period at issue. Plaintiffs attempted to support this statistical showing with evidence that the university's promotion procedures are based to a large extent on purely subjective considerations.

The district court's finding on the promotion claim was as follows:

> With regard to promotions, the court heard lengthy testimony as to the University's practices in promoting faculty from an entry level position of an untenured assistant professor on up the academic hierarchy. The court finds that the decision making on tenure and promotion is indeed based on highly subjective qualifications, but cannot condemn the practice as discriminatory in result. The University is unlike an industrial plant where more precise qualifications for promotion can be distinguished, consolidated, and put into print. The court finds no such discrimination in the Defendants' promotion practices and policies, and finds that a subjective procedure for promotion is a necessary, indispensable, and bona fide means for determining promotion in the academic field. 450 F.Supp. at 1056.

Plaintiffs argue that our decision in *Jepsen v. Florida Board of Regents*, 610 F.2d 1379 (5th Cir. 1980), rejects the hands-off approach to the university's promotion practices taken by the district court. In *Jepsen* a female associate professor brought a Title VII suit against her employer, alleging that it had discriminated against her by not promoting her to full professor. The district court, finding a qualitative difference similar to that enunciated by the district court in this case between discrimination claims made against universities and claims made against a factory or union, held for the defendant on the ground that plaintiff had failed to prove that the university had abused its discretion in failing to promote her. We reversed and remanded, holding that a plaintiff in a Title VII suit against a university need meet no higher standard than that imposed by *McDonnell Douglas Corp. v. Green*, 411 U.S. 792, 93 S.Ct. 1817, 36 L.Ed.2d 668 (1972), on other Title VII plaintiffs.

While it is clear that under *Jepsen* a university's employment practices are not free from scrutiny under Title VII, we do not read that opinion to mean that subjective factors cannot be considered by a university in making its promotion and tenure decisions.[14] Rather, the university is free to rely on such factors in rebutting a plaintiff's *McDonnell Douglas* prima facie case, and the plaintiff must then prove by a preponderance of the evidence that the reasons advanced by the university for its decision were a pretext for discrimination. Accordingly, we decline to impose a rigid, objective system for making promotion and tenure decisions on the university.

Under *Teamsters*, 431 U.S. at 336, 97 S.Ct. at 1855, plaintiffs' burden with respect to the promotion claim was "to establish by a preponderance of the evidence that [sex] discrimination was the [university's] standard operating procedure—the regular rather than the unu-

sual practice." Plaintiffs' scanty evidence of specific instances of discriminatory promotion decisions is not sufficient to meet this burden, nor is the statistical evidence that essentially demonstrates only that the percentage of assistant, associate, and full professors who were women remained relatively constant during the six-year period while the percentage of instructors who were women increased substantially. There is no evidence as to the number of men and women who were eligible for and denied tenure during the years in question and no evidence as to the average length of time men and women served in each rank before being promoted to the next one. Accordingly, we affirm the trial court's judgment on the promotion claim.

4. *Compensation.*

[7] Plaintiffs' faculty compensation claim is based entirely on statistics. Through a series of analyses, plaintiffs established that with respect to the faculty: (1) men are paid more, on the average, than women; (2) with the college mean subtracted from each person's salary, men are still paid more than women; (3) considering only faculty members hired since 1972, the year Title VII became applicable to the University of Houston, men are paid more than women; (4) male assistant, associate and full professors are paid more than women of the same rank; (5) given the same length of service at the university, men are paid more than women; (6) men are paid more than women of the same age; and (7) within each college, men are paid more than women.[15] These comparisons were intended to demonstrate that the differential between men's and women's salaries was not caused by any of the lawful, nondiscriminatory factors (e.g., rank, college, length of service, and age) that might result in men earning more than women. We find this evidence insufficient to do so.

The fundamental flaw in plaintiffs' statistical evidence is that it fails to take into account the fact that a number of factors operate simultaneously to influence the amount of salary a faculty member receives. It appears uncontroverted that the most important factor is the college in which a professor teaches—all other factors being equal, professors in colleges such as law and engineering are, because of market forces outside of the university, paid significantly more than professors in colleges such as humanities and social sciences. Accordingly, plaintiffs' statistical evidence showing that men and women of the same age,[16] rank, or length of service are paid differently does not demonstrate discrimination because the college factor has not been considered. Similarly, plaintiffs' attempt to filter out the college factor is insufficient because the effect of the other factors—e.g., age, rank, and length of service, etc.—has not been considered simultaneously. Thus, if most of the women faculty members of a given college have been hired in recent years—as is likely to be the case given that women have become available for professorships in increasing numbers over recent years—we would expect that men within that college would be paid more than women because of higher rank and length of service. In short, a faculty person's salary is dependent upon a number of factors that operate simultaneously; plaintiffs' attempt to prove that sex was one of them must fail because of their failure to filter out the combined effect of the others.

Had the university presented no evidence on the faculty compensation issue, our task would be completed by the finding that plaintiffs' statistical evidence did not prove discrimination. The university, however, performed two multiple regression analyses[17] that plaintiffs contend independently prove their faculty compensation claim. We find defendant's multiple regression analyses ambiguous and insufficient to prove plaintiffs' compensation claim.

Multiple regression analysis is a relatively sophisticated means[18] of determining the effects that any number of different factors have on a particular variable; while it may be the best, if not the only, means of proving classwide discrimination with respect to compensation in a case such as this—where a number of factors operate simultaneously to influence salary—it is subject to misuse and thus must be employed with great care. Ideally, when a multiple regression analysis is used, it will be the subject of expert testimony and knowledgeable cross examination from both sides. In this manner, the validity of the model and the significance of its results will be fully developed at trial, allowing the trial judge to make an informed decision as to the probative value of the analysis. In the instant case, the statistical evidence associated with the multiple regression analysis is inconclusive, raising more questions than it answers. The following discussion of some of our problems with the analysis is not intended to exhaust the considerations to be analyzed in evaluating a multiple regression analysis; that task will be accomplished by subsequent cases in which this statistical device is used.

The university's expert performed two multiple regression analyses on the faculty salary data. In the first, salary was the independent variable with the dependent variables being (1) the mean salary of the department; (2) experience as an instructor at any university, including the University of Houston; (3) experience as a faculty member other than at the University of Houston; (4) experience as a full professor at the University of Houston; (5) experience as an associate professor at the University of Houston; (6) experience as an assistant professor at the University of Houston; (7) possession of a doctoral degree other than a Ph.D.; and (8) possession of a Ph.D. degree. Defendant's second analysis is identical to the first except that sex is added as a ninth independent variable. Plaintiffs' multiple regression argument relies on the fact that the coefficient for the sex

variable in the university's second analysis is $694 per year with that amount being subtracted if the faculty person is a woman and added for men, resulting in an alleged difference in salary of some $1,388 per year attributable solely to a faculty member's sex. Plaintiffs' argument that this evidence satisfies their burden of proving a pattern and practice of discrimination with respect to faculty compensation may be correct—a t-statistic test demonstrates that the coefficient for the sex variable is significant. *See* Fisher *supra* n. 17 at 716–17. However, other aspects of the statistical evidence apparently are inconsistent with this conclusion, and there are a number of questions as to the validity of the multiple regression model as a whole. Moreover, the only expert to testify on the subject stated that in his opinion the multiple regression analysis did not establish that the university discriminated against women with respect to faculty compensation. Accordingly, we decline to reverse the trial court's judgment on this claim.

As for the apparent inconsistencies in the results of the university's multiple regression analyses, the first model (without sex as a factor) explained 52.4 percent of the variation around the average salary for faculty persons while the second model (with sex as a factor) explained 53.2 percent of the variation. According to the university's expert, despite the $694 coefficient for sex in the second model, the multiple regression analysis do not indicate discrimination against women because the model with sex as a factor explained only .8 percent more of the total variation around the average salary than did the model without sex: "It is not the values of the coefficients themselves which matter so much in a statistical interpretation of two models, it is the difference in proportion of variation that is explained." Plaintiffs introduced no evidence that sex was not, in a statistical sense, independent of the other independent variables in the model (e.g., department, rank, experience, and degree); thus, there has been no showing that the incre-

mental contribution of sex to the variation explained by the university's models is understated because part of its influence erroneously had been attributed to the other independent variables.[19] Further, plaintiffs did not introduce evidence that the value of the coefficient for the sex variable is significant notwithstanding the fact that only .8 percent more of the total variation was explained when sex was added into the model. As we have no basis for rejecting the opinion of the university's expert, we decline to do so.

A second inconsistency in the results of the university's multiple regression analyses supports the conclusion that discrimination was not proven by the fact that the coefficient for the sex variable was $694. The university's expert applied the first multiple regression model (without a sex variable) to each faculty member to get an estimate of the salary that each should be earning. That estimate was then compared to the faculty person's actual salary. If the university discriminated against its faculty women, one would expect that women, in general, would be paid less than the amount predicted by the model while men would be paid more. In fact, 343 men were paid less, and 302 more, than the model predicted they would be paid, while 61 women were "underpaid" and 55 "overpaid"; the ratio of underpaid to overpaid is thus 1.136 for men and 1.109 for women, thus indicating that, if anything, a higher proportion of men are underpaid than are women. In an attempt to determine whether the amount a person was underpaid or overpaid depended on that person's sex, the university's expert made similar comparisons of the numbers of men and women overpaid or underpaid by as much as $1,500. The results of this test were that 227 men were underpaid by at least $1,500 while 186 were overpaid by at least that amount, while the respective numbers for women were 34 and 30. Thus, the ratio of underpaid by at least $1,500 to overpaid by at least $1,500 is 1.220 for men and 1.133 for women, again indicating no discrimi-

nation.[20] Plaintiffs made no attempt to show that men overpaid by more than $1,500 received a substantially greater amount over $1,500 than did women, or that women underpaid by more than $1,500 were paid substantially less than $1,500 below the expected salary while men were not; we, of course, cannot assume either to be the case.

In addition to the apparent inconsistencies in the results of the university's multiple regression analyses, fundamental questions relating to the model itself are raised. Multiple regression analysis is based on three major assumptions[21]—where these assumptions fail, "the use of multiple regression analysis is likely to be inappropriate," Fisher, *supra* n. 17, at 708, though advanced tools of econometrics may allow such failure to be dealt with. *Id.* Whether these assumptions are valid in this case has not been addressed; neither have other questions such as those relating to the relationship among the independent variables,[22] whether a linear model is appropriate in this case,[23] whether variables have been erroneously included or excluded in the model,[24] and whether the fact that the model explains only 52 to 53 percent of the total variation in average salaries means that the model as a whole is not very reliable.[25]

We conclude that plaintiffs have not proven that the university discriminated against its women faculty members with respect to compensation.

C. *Professional and Administrative Staff.*

The claims made on behalf of women in professional and administrative staff positions involve compensation and the failure of the university to hire or promote women into higher level jobs.

1. *Compensation.*

Most of the evidence plaintiffs introduced in support of their claim that the university discriminated against women in professional and administrative positions is statistical in nature. Further, most of it is similar to, and suffers from the same weaknesses as, the single factor analyses plaintiffs relied on in attempting to prove their faculty compensation claims. For example, plaintiffs demonstrated that among the professional and administrative staff, men were paid more than women of the same age; men with a given length of service were paid more than women with the same number of years of service; and men were paid more than women with the same amount of formal education. Among the factors omitted from each of these analyses is the job performed by the men and women. If men occupy the higher level, better paid positions at the university—as plaintiffs' evidence on their hiring/promotion claim convincingly demonstrates—we would expect men to be paid more than women on that basis. Thus, we find that plaintiffs' isolated factor analyses are of little, if any, probative value.

Plaintiffs introduced no evidence that women were paid less than men for equal work; that failure is not necessarily fatal, however, as the Supreme Court recently held in *County of Washington v. Gunther*, ___ U.S. ___, 101 S.Ct. 2242, 68 L.Ed.2d 751 (1981), that a sex discrimination compensation claim can be brought under Title VII without regard to whether the equal work standard of the Equal Pay Act, 29 U.S.C. § 206(d), is met. In *Gunther* the women plaintiffs alleged that the county evaluated the worth of their jobs, determined that they should be paid 95 percent as much as men who held similar jobs, and yet paid them only 70 percent as much, while paying the men the full evaluated worth of their jobs. These allegations were held to state a claim under Title VII even though the men and women did not perform equal work under the Equal Pay Act standard,* the case was remanded to the district court for a deter-

mination of whether part of the pay differential was attributable to sex discrimination.

Unlike the trial court in *Gunther*, in the instant case the trial judge allowed plaintiffs to present their compensation claim without a showing that women were paid less than men for equal work. A portion of plaintiffs' evidence on this point was somewhat similar to the facts as alleged by the plaintiffs in *Gunther*. In 1975 the university formulated a pay plan for most of its professional and administrative staff employees. With the aid of an outside consulting firm, all of the jobs to be covered by the pay plan were evaluated and classified into one of nine levels, with the highest paying, most responsible jobs being those in level nine. Each level had a low and high figure associated with it representing the minimum and maximum pay a person whose job fell in that level should receive. The academic division of the professional and administrative staff employed some 68 persons when the pay plan was formulated—35 men and 33 women. Plaintiffs introduced evidence that, of those 68 persons, 21 were paid less than the minimum for the level in which their job fell, and that 18 of those 21 were women[27]; according to plaintiffs' expert, a binomial distribution statistical analysis of this data demonstrates that this allocation of men and women among the 20 underpaid employees did not occur by chance.[28] This showing is strengthened by evidence that all of the four employees in the academic division who were paid more than the maximum set for the job level of their position were men.

Furthermore, the jobs of five of the eighteen women who were paid less than the minimum for their job level and two of the women who were not paid less than the minimum were reclassified to a lower job level, while the jobs of none of the men in the academic division, including the three who were underpaid, were similarly reclassified. The significance of this conduct of the university

is demonstrated by the fact that Mr. Silber, the university official in charge of formulating the pay plan, testified that it would be inappropriate to reclassify into a lower job level the job of an employee who was being paid less than the minimum for the level in which his job was originally classified because the basis upon which a pay plan is formulated is an objective analysis of jobs, not individuals. If a goal of a pay plan is to obtain uniformity and equity in pay based upon a comparative analysis of the jobs covered by the plan, that goal clearly is frustrated by reclassifying an employee's job because the employee is being paid less than the minimum for the level in which his job originally was classified.[20]

[8] The final piece of plaintiffs' evidence supporting their compensation claim is that the university's equal opportunity officer testified that one of the reasons for developing the pay plan was to cure inequities in pay existing between men and women professional and administrative employees. Thus, plaintiffs' evidence of discrimination in the compensation of professional and administrative employees consists of the facts that (1) a statistically significant, disproportionate number of women in the academic division were paid less than the minimum established by the pay plan for the level of their jobs; (2) all four of the employees in the academic division who were being paid more than the maximum for their job level were men; (3) in the academic division, five of the eighteen women who were underpaid and two other women had their jobs reclassified into lower levels, while no jobs held by men were similarly reclassified; and (4) the university's equal opportunity officer testified that a purpose of the pay plan was to remedy sexually discriminatory compensation practices of the university. The issue is whether this is sufficient to establish by a preponderance of the evidence that the university engaged in a pattern or practice of discriminating against its professional and administrative

women employees in compensating them; *i.e.*, whether this evidence established that sex discrimination was the university's "standard operating procedure—the regular rather than the unusual practice." *Teamsters*, 431 U.S. at 336, 97 S.Ct. at 1855.

With the exception of the testimony of the university's equal opportunity officer, all of plaintiffs' evidence on the compensation claim involves the academic division of the professional and administrative staff. While it is not entirely clear how many professional and administrative employees were covered by the pay plan at the time of the reclassification, the number was at least 350, and probably was in the 450 to 550 range, with 150 to 200 of them being women.[30] As mentioned above, the academic division consisted of 68 employees, 33 of whom were women. As to the remaining 280 to 480 employees, 120 to 170 of whom were women, plaintiffs must rely on the testimony of the equal opportunity officer and on the inference, if any, that can be drawn from the situation in the academic division. As to the latter, plaintiffs were, of course, free to present evidence on the other divisions within the professional and administrative staff. Their failure to do so arguably supports an inference that the evidence would have demonstrated no discrimination in those divisions; at any rate, we decline to supply by inference the showing plaintiffs should, if indeed they could, have made. As to the equal opportunity officer's testimony, in our view her expression of her belief that the pay plan was needed to remedy inequities in pay between men and women professional and administrative employees[31] is not sufficient to establish, by a preponderance of the evidence, that sex discrimination was the university's standard operating procedure for its professional and administrative employees employed in divisions other than the academic division.

[9] We conclude that plaintiffs have not proved their compensation claim for the professional and administrative staff as a whole. That conclusion, however, does not negate the strong showing that plaintiffs made of discrimination in the academic division. As to that claim, we reverse the judgment of the district court and direct that judgment be rendered for that portion of the plaintiff class employed in the academic division of the professional and administrative staff.

2. *Hiring and Promotion.*

Plaintiffs allege that the university discriminated against its professional and administrative women employees by hiring them only for lower level positions and by not promoting them to the more responsible, higher paying jobs. While plaintiffs convincingly demonstrated that women were absent from these top level jobs, they made no showing that women hired into the lower level positions were qualified for higher level jobs. Similarly, no evidence was introduced as to the university's practices or policies with regard to promotions within the professional and administrative staff. Accordingly, the claim we address is that the university discriminated against women by not hiring them for high level professional and administrative positions.

As to that claim, plaintiffs introduced evidence that since at least as early as 1970 only one woman has ever served on a permanent basis in an administrative position at or above the level of dean.[33] The total number of these positions at the university is not in the record, though on the basis of an exhibit listing a total of fourteen colleges, it appears that there are at least twenty-one.[33] In addition, plaintiffs introduced evidence that during the 1976–77 academic year, there were no women employed in the fourteen jobs classified in levels 8 and 9 of the professional and administrative pay plan,[34] and that only one of fifteen level 7 jobs was held by a

woman.[35] Thus, plaintiffs rely on evidence that of the top fifty professional and administrative positions (twenty-nine in levels 7, 8, and 9 of the pay plan and at least twenty-one not covered by the plan), only one was a woman in the 1976–77 academic year and that the numbers would not be significantly different from these for the years preceding the 1976–77 school year.

[10, 11] As discussed above with regard to the faculty hiring claim, where special qualifications are required for a particular job, plaintiffs asserting a discriminatory hiring claim must demonstrate an availability of qualified class members to give their statistical showing meaning. We find that requirement particularly significant with respect to the positions at and above the level of dean. As to those jobs, one of plaintiffs' witnesses testified that the great majority of them are filled only after a nationwide search and that candidates for these positions must have some degree of academic excellence as well as prior administrative experience. There was no showing made as to the number of men and women with these qualifications available for such positions at the University of Houston. To the contrary, the university introduced evidence that it had recently taken applications for a new associate chancellor, a provost, and two associate provosts; for these four positions, 202 applications were received, only eleven of which were from women.

Similarly, plaintiffs made no availability showing for the 29 jobs in levels 7, 8, and 9. While their brief states that "with the possible exception of the very highest level jobs, promotion is effected from within the ranks of current employees," there is no record reference supporting that statement, and we have been unable to find evidence in the record on this point. If that statement were substantiated, plaintiffs might be correct in their assertion that the only necessary availability showing would be that of women in the ranks of current em-

ployees. *Johnson v. Uncle Ben's, Inc.*, 628 F.2d 419, 425 (5th Cir. 1980), *vacated and remanded on other grounds*, ___ U.S. ___, 101 S.Ct. 1967, 68 L.Ed.2d 290 (1981).[36] As it has not been demonstrated that jobs in levels 7, 8, and 9 are filled by promoting employees in lower level jobs, we are left without availability data against which to view the university's hiring practices.[37]

Furthermore, the university introduced evidence that four of the six jobs in level 9 had been held by men for ten years or more so that no discriminatory hiring decision could have been made during the period covered by this lawsuit. One of the other two level 9 positions is director of the physical plant; while the record does not reveal how long the male currently in that position has held the job, it is clear from one of the exhibits that he has been employed in that capacity at least since 1974. The sixth level 9 job was filled by a man a year and a half or so before trial. Thus, only one or perhaps two of the six level 9 jobs were even possibly the subject of a discriminatory hiring decision made during the period at issue.

Finally, we note that at most plaintiffs established that the university had discriminated against only one individual woman in its hiring of professional and administrative employees.[38] Under *Hazelwood*, 433 U.S. at 307-08, 97 S.Ct. at 2741-42, evidence of individual instances of discrimination is not necessary where plaintiffs are able to show "gross statistical disparities"; in our view in light of (1) the relatively small number of positions in levels 7, 8, and 9;[39] (2) the diverse and specialized qualifications necessary for such positions; (3) the absence of an availability showing for these jobs; and (4) the university's showing of a lack of turnover for level 9 positions, a showing of a sufficiently "gross statistical disparity" has not been made. Accordingly, a showing in addition to the statistics was required for plaintiffs to satisfy their burden of proving, by a prepon-

derance of the evidence, that the university had engaged in a pattern or practice of discriminating against women with respect to hiring top level professional and administrative employees. As sufficent independent evidence of discrimination was not introduced, we affirm the district court's judgment on this claim.

In closing, we add a note both rueful and cautionary. The bar is reminded that sound statistical analysis is a task both complex and arduous. Indeed, obtaining sound results by these means, results that can withstand informed testing and sifting both as to method and result, is a mission of comparable difficulty to arriving at a correct diagnosis of disease.

We are no more statisticians than we are physicians, and counsel who expect of us informed and consistent treatment of such proofs are well advised to proceed as do those who advance knotty medical problems for resolution. Our innate capacity in such matters extends to "the inexorable zero"[40] and perhaps, unevenly, somewhat beyond; but the day is long past—past at least since the Supreme Court's sophisticated analysis in *Castaneda v. Partida*, 430 U.S. 482, 97 S.Ct. 1272, 51 L.Ed. 2d 498 (1977)—when we proceed with any confidence toward broad conclusions from crude and incomplete statistics. That everyone who has eaten bread has died may tell us something about bread, but not very much.

CONCLUSION

The district court's judgment for the university on the compensation claim for professional and administrative women employees in the academic divisions is reversed and the case remanded for further proceedings related to that claim. On remand, the question of individual relief for those academic division employees who were victims of the university's discriminatory practices will arise. As plaintiffs have proven that the university engaged in

a pattern or practice of discriminating against women employees in the academic division of the professional and administrative staff, an inference arises that each of those women was discriminated against. Accordingly, each is "presumptively entitled to relief, subject to a showing by the [university] that its [compensation of the employee] was not based on its policy of discrimination." *Teamsters*, 431 U.S. at 362, 97 S.Ct. at 1868. Of course, the showing required of the university to avoid liability to an individual employee will be substantially greater for those members of the class who were paid less than the minimum for their job level than for the other members who were not. For those individual members of the class found to be entitled to relief, the amount of damages will have to be ascertained.

The judgment is affirmed in all other respects.

AFFIRMED IN PART, REVERSED AND REMANDED IN PART.

ORIGINAL OPINION OF COURT OF CIVIL APPEALS FOR THE FIFTH CIRCUIT

FOOTNOTES

1. 42 U.S.C. § 2000e.

2. Relying on *East Texas Motor Freight System, Inc. v. Rodriguez*, 431 U.S. 395, 97 S.Ct. 1891, 52 L.Ed.2d 453 (1977), the university argues that the class should not have been certified because the named plaintiffs were not qualified to hold the vast majority of faculty and administrative positions. In *Falcon v. General Tel. Co.*, 626 F.2d 369, 375 (5th Cir. 1980), we rejected defendants' argument that *Rodriguez* bars the kind of "across the board" attack on discriminatory employment practices plaintiffs have made in this case.

3. In her application for reclassification Ms. Hill sought the title "manager of operations." Her supervisor, Dr. Motard, approved her request though he expressed reservations regarding the title "manager of operations" as opposed to "operations supervisor," apparently because she lacked familiarity with computer operating systems and programming languages. While the parties have disputed the issue of Ms. Hill's appropriate title at some length, we find that issue largely irrelevant to the fundamental questions of whether her duties were discriminatorily curtailed and whether her termination was discriminatorily motivated.

4. Killough was a well-trained engineer with a great deal of computer experience who was assisting in the lab on a voluntary basis. The evidence indicated that it took several months for the university to find Folkerth and that he had accepted the job for less than market value. In contrast, Hill was replaced by her assistant, Ms. Sandy White, who by all accounts performed admirably in that position and got along well with Killough and Folkerth. While the fact that Hill was replaced with a female substantially weakens—if indeed it does not defeat—her claim that she was terminated because of her sex, *see Marks v. Prattco, Inc.*, 607 F.2d 1153, 1155 (5th Cir. 1979), it does not resolve the retaliatory discharge question.

5. As discussed below, plaintiffs also introduced evidence of several specific instances of allegedly discriminatory employment decisions made by the university.

6. That statistics can be, and often are, misused is nothing new. In his autobiography, Mark Twain observed that "[t]here are three kinds of lies—lies, damned lies and statistics." While it may be that the numbers themselves do not lie, the meaning ascribed to the numbers certainly can be misleading. Plaintiffs' single factor analyses supporting their compensation claims, discussed below, are good examples. Another is an argument made by the university that the percentage increase in the number of women faculty members hired over the six years at issue was greater than the corresponding percentage increase for men. That statement is true and at

first glance seems significant; further reflection, however, demonstrates that it is not. If the university had one female faculty member and hired another, the number of female faculty members would have increased by 100%; if the university had 100 male faculty members and hired 50 more, the percentage increase would be only 50%. Thus, by hiring 1 woman and 50 men, the university would have increased the number of female faculty members at a rate twice as great as that for its male faculty.

7. Effective March 24, 1972, application of Title VII was extended to include state and local governmental employers. *Hazelwood*, 433 U.S. at 304 n.7, 97 S.Ct. at 2740 n.7.

8. Plaintiffs also introduced evidence tending to show that in a number of instances the university failed to comply with its own equal employment procedures. For instance, there was some indication that perhaps as many as 15 percent of faculty vacancies were filled on the same day the vacancy was announced, thus indicating that the person hired had been preselected rather than chosen as a result of compliance with procedures designed to insure that minorities were not discriminated against. Initially we note that there is no indication of the proportions of men and women who were hired under these circumstances. Further, while we find failure to comply with equal employment opportunity procedures significant, in the absence of stronger proof of discrimination than is present in this case we do not find that failure sufficiently probative to require a different result.

Data on the percentage of applicants for faculty positions who were women would be very relevant to the discriminatory hiring claim. The absence of such evidence, however, will not prevent plaintiffs from recovering. *Hazelwood*, 433 U.S. at 308 n.13, 97 S.Ct. at 2742 n.13.

9. It is clear that statistical challenges to a defendant's hiring practices for positions requiring special qualifications must be based not on comparisons with the general population but on comparisons with "the smaller group of individuals who possess the necessary qualifications." *Hazelwood*, 433 U.S. at 308 n.13, 97 S.Ct. at 2742 n. 13. *Mayor v. Educational Quality League*, 415 U.S. 605, 620-21, 94 S.Ct. 1323, 1333, 39 L.Ed.2d 630 (1974).

10. The National Research Council of the National Academy of Sciences, Summary Report 1977 Doctorate Recipients from United States Universities 8 (1978).

11. That plaintiffs' availability data are suspect is indicated by the fact that defendants introduced evidence that 30.4 percent of all 1977 doctorate degree recipients who planned to teach were women. As both parties agree that the trend of recent years is an increasing population of women receiving doctoral degrees, one would expect that the percentage of newly graduated doctorate recipients available for university teaching positions in 1977 who were women would be greater than the percentage of women holding such positions in that same year. As the great majority of faculty members with 10 to

20 or more years teaching experience in 1977 were undoubtedly men, we would expect to see a substantial difference between the percentage of newly graduated doctorate degree recipients who were women in 1977 and the percentage of all university faculty members with doctorate degrees who were women in that same year. Instead, the percentages are not only very close together, but in fact the percentage of women on college and university faculties in 1977—31.8 percent per plaintiffs' availability data—is *higher* than the percentage of doctorate degree recipients in 1977 who were women—30.4 percent per defendants' availability data. Perhaps the explanation for this anomaly is the one suggested in the text: that a substantial proportion of the women included in plaintiffs' availability data are junior college and community college teachers who do not hold doctorate degrees and who are therefore not qualified for employment as faculty at the University of Houston.

12. The record does not provide a basis for determining the percentage of doctorate recipients during the entire six-year period who were women; accordingly we are unable to perform a precise binomial distribution statistical analysis of defendants' hiring of instructors and assistant professors during the six-year period. *See Castaneda v. Partida*, 430 U.S. 482, 496 n.17, 97 S.Ct. 1272, 1281 n. 17, 51 L.Ed.2d 498 (1977). However, even assuming that 30.4 percent of all doctorate recipients during the entire six years were women—due to the trend of an increasing proportion of women doctorate recipients in recent years, the 30.4 percent figure of 1977 is undoubtedly too high for the entire six-year period from 1973 to 1978—the difference between the number of women hired as instructors (37.5% of 173 = 65) and assistant professors (26% of 350 = 91) and the number we would expect to have been hired (instructors, 30.4% of 173 = 53; assistant professors, 30.4% of 350 = 106) is not statistically significant under the analysis approved by the Supreme Court in *Castaneda*. *Id.*

13. It is clear that statistical evidence relating to claims of discrimination in hiring is of little probative value unless it is based on an analysis of those members of the population who possess the necessary special qualifications for the job at issue. *Hazelwood*, 433 U.S. at 308, 97 S.Ct. at 2741-42. However, the extent to which a plaintiff must tailor her availability data in a complex class action suit involving different categories of jobs among which there is reason to believe that the availability factor is significantly different is not clear. In *Hazelwood* plaintiffs challenged the hiring practices of a local school district, and the Supreme Court held that the proper statistical "comparison was between the racial composition of [the district's] teaching staff and the racial composition of the qualified public school teacher population in the relevant labor market." *Id.*

Arguably *Hazelwood* dictates that the proper comparison in this case is the one made by plaintiffs: between the sex composition of the university's new faculty members hired during the six years at issue and the sex composition of all college and university teachers during that time period. In our view, however, there is a significant distinction between *Hazelwood* and the instant case. In *Hazelwood* there was no indication that blacks were any more or

less available for any particular class of teaching position in the Hazelwood public schools than for all teaching positions within those schools. Here it is clear that women qualified for instructor and assistant professor positions were available in substantially greater numbers than for associate and full professorships. Further, the evidence is clear and undisputed that women were available in substantially greater numbers for faculty positions in fields such as humanities, social sciences, and education than they were in fields such as life sciences, physical sciences, and engineering. While we need not today decide whether in a case such as this plaintiffs must make a separate availability showing with respect to each department within the university, such a showing at least should have been made at the college level. As the Supreme Court noted in *Teamsters*, the "usefulness [of statistics] depends on all of the surrounding facts and circumstances." 431 U.S. at 340, 97 S.Ct. at 1856-57. Absent a more particularized availability showing, plaintiffs' statistical evidence with respect to faculty hiring is of limited usefulness.

14. Plaintiffs, in fact, do not even so contend: "Even though some subjective evaluation procedures may be necessitated by the complexity of positions in a university environment, university decisions in hiring, promotion, tenure and wages are as much subject to court review as those of other types of employers." *See Davis v. Board of School Comm'rs*, 600 F.2d 470, 475 (5th Cir. 1979).

15. For three of these seven categories, plaintiffs also introduced evidence that the statistical disparities between men's and women's salaries had statistical significance, *i.e.*, that there was less than a 2% possibility that the discrepancies were attributable to chance. Because of our disposition of the compensation claim, we need not decide what effect the failure to demonstrate statistical significance with respect to the other four comparisons would have on plaintiffs' showing.

16. We need not and do not express an opinion on whether age alone is a valid basis for paying one faculty person more than another.

17. For an explanation of the theory and the mechanics of multiple regression analysis and a description of its use in a number of other cases, *see generally* Fisher, *Multiple Regression in Legal Proceedings*, 80 Colum.L.Rev. 702 (1980); Finkelstein, *The Judicial Reception of Multiple Regression Studies in Race and Sex Discrimination Cases*, 80 Colum.L.Rev. 737 (1980).

18. In *Wade v. Mississippi Co-op. Extension Serv.*, 528 F.2d 508 (5th Cir. 1976), defendants challenged the probative value of plaintiffs' multiple regression analysis because of its sophisticated nature. While acknowledging that "multi-variant regression analysis is indeed a sophisticated and difficult method of proof in an employment discrimination case," *id.* at 517, we found that the statistical evidence had been supplemented by additional evidence of specific instances of discrimination and that the combination of these two forms of evidence was sufficient to establish an inference of discrimination.

We do not read *Wade* to mean that statistical evidence in the form of a multiple regression analysis, standing alone, can never satisfy plaintiff's burden of proving a pattern and practice of discrimination. As discussed earlier in this opinion, the Supreme Court has stated that "[w]here gross statistical disparities can be shown, they alone may in a proper case constitute prima facie proof of a pattern or practice of discrimination." *Hazelwood*, 433 U.S. at 307-08, 97 S.Ct. at 2741. While the gross statistical disparities described in *Hazelwood* refer to differences between the number of minorities hired and the number available, we see no reason to require independent evidence of specific instances of discrimination for a compensation claim where a gross statistical disparity is established by a multiple regression analysis. While such an analysis is more complex than a comparison of the number of minorities hired with the number available, if properly used, multiple regression analysis is a relatively reliable and accurate method of gauging classwide discrimination. Of course, where the employer is engaged in widespread discrimination against a class of employees, there should be many individual examples of such discrimination, and evidence of them would be admissible to support plaintiff's statistical showing. Thus, in *Teamsters*, 431 U.S. at 338, 97 S.Ct. at 1856, the Court noted that the statistical evidence was bolstered by evidence of over 40 specific instances of discrimination.

19. For example, if plaintiffs had proven that women were discriminated against with respect to promotion, the independent variable for experience as an assistant professor would be related to sex because women, due to the discrimination, would have more experience at that rank than would men. In that event, part of the variation in average salary that should have been attributed to sex would not have been because it would have been "explained" by the experience-as-an-assistant-professor variable. As discussed above, plaintiffs did not prove discrimination with respect to promotion.

20. While a higher proportion of men (186 ÷ 645 = 28.84%) than women (30 ÷ 116 = 25.86%) were "overpaid" by at least $1,500, men were also more frequently underpaid by at least $1,500 than were women (men, 227 ÷ 645 = 35.19%; women, 34 ÷ 116 = 29.31%).

21. Each of the three assumptions involves those influences on the dependent variable, *i.e.*, salary, that are not included in the model and that are collectively referred to as the "random disturbance term." The three assumptions are:

> (a) that the effects of the random disturbance term are independent of the effects of the independent variable; (b) that the values of the random term for different observations are not systematically related and that the average squared size of the random effect has no systematic tendency to change over observations; and (c) that the sum of random effects embodied in the disturbance term is distributed normally, in the "bell curve" generally characteristic of the distribution of the sum of independent random effects.

Fisher, *supra* n.17, at 708.

22. *Id.* at 713.

23. *Id.* at 711-12 n.20.

24. *Id.* at 713-15.

25. *Id.* at 720.

26. In *Gunther* the Supreme Court was careful to note that the issue before it did not involve "the controversial concept of 'comparable worth,' under which plaintiffs might claim increased compensation on the basis of a comparison of the intrinsic worth or difficulty of their job with that of other jobs in the same organization or community." ___ U.S. at ___, 101 S.Ct. at 2246 (footnotes omitted). The Court found that that issue was not before it because plaintiffs alleged that the county itself had evaluated the worth of plaintiffs' jobs and nevertheless chose to pay them less while not making a similar reducation in the wages paid to men. As discussed below, plaintiffs in the instant case introduced evidence of similar import—our decision is based on this evidence and bears no relation to the "comparable worth" concept.

27. In their brief and statistical analysis, plaintiffs claim that 20 employees in the academic division were found to be underpaid and that 17 of them were women. The source of this information is also in the record, however, and it reveals that 21 employees were underpaid, 18 of whom were women.

28. Such a distribution of men and women would, according to plaintiffs' expert, occur by chance only four times in 10,000; that possibility is sufficiently minimal to be ignored.

29. Plaintiffs introduced no evidence as to the reason for the reclassification; however, one woman who was paid less than the minimum for the level in which her job originally was classified and whose job subsequently was reclassified into a lower job level testified that her duties were not reduced when her job was reclassified. As the only positions reclassified into lower job levels were held by women and as the university introduced no evidence on that issue either, we find that the fact of the reclassification is probative as to the discriminatory compensation claim.

30. Various charts comprising plaintiffs' statistical evidence reveal different numbers of employees covered by the plan in the years 1976 and 1977, when the reclassifications apparently occurred.

31. Relevant portions of the equal employment officer's testimony follows:

> There was no plan that included [the professional and administrative employees], and our hiring salary was not very systematic, it just depended on the amount in the budget.

I personally felt, and the personnel director agreed with me, that inequities had grown up in the professional plan, particularly since the earlier years when I was employment manager, there was a lot of individual departmental hiring and they just hired people in and set an arbitrary salary.

We felt that if there were inequities, particularly among or between men and women, that that is where they were.

So we made the commitment in the affirmative action plan that we would develop a professional pay plan.

32. At the time of trial, the university apparently had just completed a reorganization of its top administrative positions. While it is not entirely clear from the record, it appears that from the departmental chairman, the hierarchy proceeds upward as follows: dean and assistant or associated deans; provost and associate provosts; chancellor and associate chancellors; and president. Shortly before trial a woman was named assistant provost; this action by the university, which occurred on the very eve of trial, is of minimal probative value.

33. Fourteen deans, one provost, two assistant or associate provosts, one chancellor, two associate chancellors, and one president.

34. In May of 1978 a woman's job that apparently had been classified in level 7 was reclassified as a level 8 position. This conduct, like that described in footnote 32, occurred on the eve of the June 1978 trial and is of little probative value on the question of whether the university discriminated against women during the six academic years from 1972 to 1978.

35. The positions of dean, provost, chancellor, president, and assistant or associate dean, provost and chancellor are not covered by the professional and administrative staff pay plan. The breakdown by sex of the employees in the nine levels established by the plan during the 1976–77 academic year was as follows:

Pay Plan Level	Total	Male	Female
9	6	6	0
8	8	8	0
7	15	14	1
6	26	17	9
5	50	35	15
4	39	27	12
3	64	40	24
2	83	40	43
1	66	24	42
Totals	357	211	146

36. But even then questions would arise whether promotion is from level to level and, if so, whether discrimination would have been shown for hiring into levels 8 and 9 in light of the fact that only one woman held a level 7 job. Further, due to the nature of the jobs in levels 7, 8, and 9, it is not evident that promotions could routinely be effected from one level to the next. *See* n.37, *infra*.

37. That special qualifications within the meaning of *Hazelwood*, 433 U.S. at 308 n.13, 97 S.Ct. at 2742 n.13, are required for these jobs is evident from their descriptive titles. The 14 jobs in levels 8 and 9 are: staff legal counsel, director of the physical plant, director of computer operations and educational systems, controller, director of counseling and testing, director of personnel services, director of architectural services, director of construction, director for research development, director of housing, director of internal auditing, director of facilities, director of administrative systems, and director of the university center. While some of these positions arguably require only a college degree and administrative experience, the majority appear to require a specialized education as well as technical and administrative work experience. We recognize that making the required availability showing in a case such as this is a difficult task; while we need not and do not decide the question, it may be that claims of discriminatory hiring with respect to a relatively small number of positions requiring diverse and specialized qualifications relating to education and work experience simply are inappropriate claims for class actions that rely on statistical proof.

38. Plaintiffs attempted to demonstrate that three individual professional and administrative women employees were victims of discriminatory hiring practices. One witness testified that she and a number of other people applied for a position as a clerk manager in the College of Education; that the duties for that position were substantially similar to the duties she was then performing for the university in a lower paying job; and that a male got the job. The university did not rebut this evidence.

A second witness testified that she had participated in an administrative internship program designed to train women for high level administrative positions within the university but that when a vacancy occurred for the position of associate dean of faculty, a man was hired. However, this same witness responded to the question of whether she was interested in advancing into an academic administrative position as follows: "I had very mixed feelings about it. At the time I finished my internship, I was glad it was over, glad I was going back to the department, and felt, and didn't hide the feeling, that I had mixed feelings on whether or not in the future I wanted an administrative job." Under these circumstances, the university certainly had a valid reason for not offering her the associate dean of faculty position.

A third witness testified that she was not promoted to station manager of the university's television station despite having been led to believe that she would be when the present manager retired. Instead, a man with a high school education was hired—she had a master's degree in radio-television—and she was told by the overall

supervisor of the station that a man who could deal with the engineers was needed for the job. We have several problems with this evidence. First, the incident occurred around 1969, before Title VII became applicable to state-operated universities, thus limiting its probative value. *See Hazelwood*, 433 U.S. at 309 n.15, 97 S.Ct. at 2742 n.15. Second, the university's evidence showed that the man hired had 10–15 years' experience at the station covering all phases of its operations, with extensive experience in the broad field of public programming. By contrast, the woman not hired had only a few years' experience that was concentrated in the more narrowly defined field of instructional programming.

39. A review of the distribution of men and women in the nine pay levels, *see* n.35, *supra*, indicates that women held the following percentages of jobs in each level: level 1, 63.6%; level 2, 51.8%; level 3, 37.5%; level 4, 30.8%; level 5, 30%; level 6, 34.6%; level 7, 6.7%; level 8, 0%; and level 9, 0%. Plaintiffs argue that these percentages demonstrate that women were discriminatorily assigned to lower level jobs. As discussed, however, no showing was made that women qualified for positions in a given job level were not considered for such positions but were instead hired into lower level jobs. As for job levels 3, 4, 5, and 6, no showing was made that qualified women were available for these positions in greater proportions than 30–37.5%. As all of these positions are by definition professional and administrative jobs, rather than clerical, ministerial positions, a general work force availability figure cannot be applied; rather, a *Hazelwood* showing of persons available possessing the necessary special qualifications is necessary.

40. Then Chief Judge Brown, writing for the court in *United States v. T.I.M.E.*—D.C., 517 F.2d 299, 315 (5th Cir. 1975).

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT*
UNIT A

No. 79-2817

Jeannine W. WILKINS and Sharon D. Hill, et al.,
Plaintiffs-Appellants,

V.

UNIVERSITY OF HOUSTON, et al.,
Defendants-Appellees.

(DECEMBER 7, 1981)

Female faculty members brought civil rights action against university claiming discrimination in compensation. The United States District Court for the Southern District of Texas, Ross N. Sterling, J., 471 F.Supp. 1054, entered judgment in favor of university and faculty members appealed. The Court of Appeals, 654 F.2d 388, affirmed in part and reversed in part. On petition for rehearing, the Court of Appeals held that although sex-free regression analysis showed that women were paid less than the amount predicated by the model while men were paid more, statistical evidence did not show that women were discriminated against in compensation.

Petition denied.

Evidence that university's own sex-free regression analysis showed that faculty women were generally paid less than the amount predicated by the model while men

---

* Former Fifth Circuit case, Section 9(1) of Public Law 96-452—October 14, 1980.

were paid more, that a regression analysis utilizing sex variable showed that men and women were treated equally with regard to pay, and that the former analysis showed that 49% of the males and 31% of the females were overpaid did not establish conclusively that female faculty members of the university were discriminated against in compensation.

Where female faculty members who purported to use university's statistics for their own purposes did not fulfill the burden of showing that the multiple regression analysis model which had been employed was valid, conclusions from that model did not establish discrimination against the faculty members.

Carol Nelkin, Houston, Tex., for plaintiffs-appellants.

Lonny Zwiener, Asst. Atty. Gen., Austin, Tex., for defendants-appellees.

Appeal from the United States District Court for the Southern District of Texas, 471 F.Supp. 1054.

ON PETITION FOR REHEARING AND SUGGESTIONS FOR REHEARING EN BANC

(Opinion August 28, 5 Cir. 1981, 654 F.2d 388)

Before BROWN, COLEMAN and GEE, Circuit Judges.

PER CURIAM:

[1] In their petition for rehearing appellants press upon us for the first time the University of Houston's "Suggestion of Error in Presentation of Statistical Evidence." In the suggestion of error, the university admits that its expert on faculty compensation, Dr. Douns,

erred when he testified that his first regression analysis model without a sex variable produced a table showing that men and women were treated equally with regard to pay. In fact, Dr. Douns was using his second regression analysis, which utilized a sex variable. The actual "sex-free" model showed that 49 percent of the males were overpaid, while only 31 percent of the females were overpaid, the relevant preponderance of underpaid women having less than 8 chances in 10,000 of occurring by chance.

This point casts doubt on our opinion on faculty compensation insofar as our prior opinion relied on the fact that "the only expert to testify on the subject stated that in his opinion the regression analysis did not establish that the university discriminated against women with respect to faculty compensation." 654 F.2d 388 at 403. Also incorrect is our discussion, *id.*, at 404, of a "second inconsistency" in the results of the university's multiple regression analysis. Contrary to what we stated in our original opinion, it does appear on the basis of the university's own sex-free regression analysis that faculty women in general were paid less than the amount predicted by the model, while men were paid more.[1] Nonetheless, we still adhere to our original conclusion and affirm the district court on the class plaintiffs' faculty compensation claim.

[2] The thrust of our original opinion on faculty compensation remains unchanged: plaintiffs have failed to demonstrate the validity of the multiple regression

---

1. Nonetheless, the university's data that 49 percent of the males and 31 percent of the females were "overpaid" may or may not be statistically significant, depending on the validity of the model, as we discuss below. This data does not conclusively establish that female University of Houston faculty members were discriminated against in compensation.

model as a whole.[2] As we stated in our original opinion, "Multiple regression analysis is a relatively sophisticated means of determining the effect that any number of different factors have on a particular variable." 654 F.2d at 402-03. Since multiple regression analysis is subject to misuse, courts cannot be expected to accept at face value conclusions derived from such a model absent expert testimony concerning the validity of the model itself. In this case, the class plaintiffs are attempting to use the university's own data to establish a case of discrimination in faculty compensation. At trial, however, only one expert attempted—on the university's behalf—to lay a foundation for the validity of the model used. As we have seen, the value of this expert's testimony is now doubtful at best. Yet when the class plaintiffs purported to use the university's statistics for their own purposes, they did not fulfill their burden of showing that the multiple regression analysis model employed was valid. Without guidance, this court cannot be expected to resolve in the class plaintiffs' favor fundamental questions relating to the model itself.[3]

---

2. Also undisturbed is our original discussion, 654 F.2d at 403, of the first inconsistency with the university's multiple regression analysis. Consideration of the university's "suggestion of error" does not change the fact that the model with sex as a factor explained only .8 percent more of the total variation around the average salary than did the model without sex.

3. As we pointed out in our original opinion, multiple regression analysis is based upon three major assumptions, and where these assumptions fail, "the use of multiple regression analysis is likely to be inappropriate." Fisher, *Multiple Regression in Legal Proceedings*, 80 Colum.L.Rev. 702 (1980). Neither the university's expert, Dr. Douns, nor the class plaintiffs have addressed whether these assumptions are valid in this case; "neither have other questions, such as those relating to the relationship among the independent variables, whether a linear model is appropriate in this case, whether variables have been erroneously included or excluded in the model, and whether the fact that the model explains only 52 to 53 percent of the total variation in average salary means that the model as a whole is not very reliable." 654 F.2d at 404-05.

We have examined with some care class plaintiffs' other contentions in their petition for rehearing and conclude that none have merit.

The petition for rehearing is DENIED, and no member of this panel nor judge of this Administrative Unit in regular active service having requested that the Court be polled on rehearing en banc, Rule 35, Federal Rules of Appellate Procedure; Local Fifth Circuit Rule 16; Fifth Circuit Judicial Council Resolution of January 14, 1981, the suggestions for rehearing en banc are DENIED.

UNITED STATES COURT OF APPEALS

For The Fifth Circuit

No. 79-2817

D.C. Docket No. CA-75-H-644

JEANNINE W. WILKINS and
SHARON D. HILL, ET AL.,
Plaintiffs-Appellants

V.

UNIVERSITY OF HOUSTON, ET AL.,
Defendants-Appellees.

Appeal from the United States District Court for the
Southern District of Texas
Before BROWN, COLEMAN AND GEE,
Circuit Judges.

J U D G M E N T

This cause came on to be heard on the transcript of the record from the United States District court for the Southern District of Texas, and was argued by counsel;

ON CONSIDERATION WHEREOF, It is now here ordered and adjudged by this Court that the judgment of the said District Court in this cause be, and the same is hereby, affirmed in part and reversed in part; and that this cause be and the same is hereby remanded to the said District Court in accordance with the opinion of this Court;

IT IS FURTHER ORDERED that each party shall bear his own costs on appeal, to be taxed by the Clerk of this Court.

August 28, 1981

FULL TIME FACULTY WITH DEGREES OTHER THAN Ph.D.

Data From Plaintiffs' Exhibit 39E
Tab-1977 Fulltime

12	No Degree
31	Bachelor Degree
34	Masters Degree
0	Degree Unknown

NAME	SEX	DEGREE	SERVICE	DEPT.	JOB TITLE
Adelman, Jeffry	M	34	70	HIS	Asst. Prof.
Alessi, Dana L.B.	F	34	75	LIB	Assoc. Prof/Libr.
Alessi, Paul T.	M	0	75	SPA	Asst. Prof.
Alexander, John E.	M	34	75	ART	Instructor
Alexander, Louis I.	M	34	63	COM	Asst. Prof.
Alford, Jacquelyn A.	F	34	74	S W	Asst. Prof.
Anderson, Myron C.	M	34	59	ARC	Prof.
Andrus, Archie L.	M	34	69	DRA	Asst. Prof.
Ansel, Steven Alan	M	36	75	MUS	Asst. Prof.
Antunes, George E.	M	0	74	POL	Assoc. Prof.
Anzalone, William A.	M	31	64	ART	Assoc. Prof.
Austin, William	M	0	74	PHI	Assoc. Prof.
Bacon, Philip	M	36	71	GGI	Prof.
Baker, Suzanne	F	0	76	LAW	Asst. Prof.
Baldwin, Joseph G.	M	0	65	MTH	Assoc. Prof.
Balgopal, Pallassana R.	M	0	74	S W	Asst. Prof.
Barnstone, Howard	M	34	59	ARC	Prof.
Barrow, Anita M.	F	35	77	ANT	Instructor
Beaird, A. Michael	M	33	75	LLB	Asst.Prof./Asst.Lbr.
Beckham, Huey P.	M	34	69	ART	ASsoc. Prof.
Benner Charles P.	M	34	45	MTH	Assoc. Prof.
Bernard, Richard T.	M	34	73	BST	Asst. Prof.
Berneman, Louis P.	M	34	76	C&I	Asst. Prof.
Bezman, Michel	M	36	75	ARC	Assoc. Prof.
Blakely, Newell M.	M	34	49	LAW	Prof.
Bloom, Joel A.	M	34	70	HPE	Asst. Prof.
Bonar, Albert J.	M	0	49	CE	Assoc. Prof.
Bond, Robert E.	M	31	56	CT	Asst. Prof.
Braden, Sally J.	F	34	75	LIB	Asst. Prof./Libr.
Brady, Valentina	F	31	75	FRE	Assoc. Prof.
Brand, Marvine	F	31	69	LIB	Assoc. Prof./Libr.
Britton, Earle V., Jr.	M	0	76	ARC	Assoc. Prof.
Britton, Helen M.	F	0	74	LIB	Assoc. Prof./Libr.
Britton, Raymond L.	M	33	58	LAW	Prof.
Brown, Sanford M.	M	34	59	ACC	Assoc. Prof.
Brownlee, Robert G.	M	34	59	MUS	Assoc. Prof.
Brown-Burke, Richard L.	M	0	67	OBM	Assoc. Prof.
Bunker, George R.	M	0	74	ART	Prof.
Burton, Philip	M	36	75	ART	Asst. Prof.
Blythewood, Gilbert	M	34	57	OBM	Assoc. Prof.
Carpenter, Ronn L.	M	0	69	MTH	Assoc. Prof.
Carey, Sharon	F	34	76	SW	Instructor
Cass, Robert C.	M	31	75	PSY	Asst. Prof.
Castresana, Luis	M	0	75	SPA	Asst. Prof.
Caux, Claude	M	34	74	DRA	Instructor
Chehlaoui, Riad F.	M	0	75	OBM	Asst. Prof.
Chen, Chih-Fan	M	34	66	EE	Prof.
Cherni, Rita	F	34	77	PHA	Asst. Prof.
Chomel, Luisetta E.	F	34	72	SPA	Asst. Prof.
Cimerhanzel, Samye R.	F	34	70	SPA	Instructor
Cionsky-Taylor, Irina	F	34	73	SPA	Instructor
Clark, Thomas D., Jr.	M	34	68	MT	Assoc. Prof.
Cleghorn, James D.	M	34	71	ENG	Assoc. Prof.
Clifton, Noel F. Jr.	M	0	74	SPC	Instructor
Collins, George L.	M	31	50	COM	Asst. Prof.
Coogan, Peter F.	M	34	77	LAW	Prof.
Cook, Howard	M	0	66	MTH	Prof.
Cooper, Dale S.	M	34	76	MT	Adjunct Prof.
Crane, L. Edgar	M	0	67	MKT	Prof.
Crockett, Ulysses S.	M	34	77	LAW	Adjunct Prof.
Crump, David	M	33	75	LAW	Asst. Prof.
Crump, Joseph R.	M	31	49	CHE	Prof.
Culbertson, Margaret D.	F.	34	75	LIB	Asst. Prof./Libr.
Culhane, Paul J.	M	34	75	POL	Asst. Prof.
Cullen, Anthony Peter	M	34	71	OPT	Assoc. Prof.
Cunningham, Burlin C.	M	31	52	FT	Asst. Prof.
Cunningham, R.G.	M	34	69	ARC	Asst. Prof.
Curiel, Herman	M	34	72	SW	Asst. Prof.
Curry, Beulah	F	34	76	C&I	Instructor
Curry, Herbert H.	M	31	58	MT	Prof.
Deatherage, Roger B.	M	0	75	ART	Instructor
Deen, Wendell M.	M	34	73	CT	Asst. Prof.
Dees, David A.	M	34	76	COM	Asst. Prof.
Dewald, Lester J.	M	12	74	BST	Adjunct Prof.
Disch, James	M	0	76	FED	Adjunct Asst. Prof.
Dole, Jr. Richard F.	M	12	77	LAW	Visiting Prof.
Dossat, Roy J.	M	34	52	MT	Prof.
Druary, John M.	M	31	59	MUS	Prof.
Dunn, W. Marcus	M	36	75	ACC	Asst. Prof.
Durand, Roger E.	M	0	74	POL	Assoc. Prof.
Earnest, Jeffry D.	M	34	74	LIB	Asst. Prof. Lib.
Ebaugh, Helen R.	F	34	73	SOC	Asst. Prof.
Edinburgh, John D.	M	31	68	ET	Instructor
Elliott, Frankie Jo	F	34	61	MKT	Asst. Prof.
Engel, Rayme E.	M	34	76	PHI	Asst. Prof.
Fannin, Troy E.	M	31	65	OPT	Prof.
Fazekas, Gabriel A.	M	34	65	ME	Prof.
Feld, Effie G.	F	34	65	ENG	Instructor
Felder, B. Dell	F	0	64	C&I	Prof.
Felts, Rebecca N.	F	34	64	C&I	Asst. Prof.
Ferguson, Christopher W.	M	0	75	ENG	Asst. Prof.
Finley, David R.	M	34	76	ACC	Instructor

EXHIBIT "B" -

NAME	SEX	DEGREE	SERVICE	DEPT.	JOB TITLE
Finnell, Gilbert L. Jr.	M	34	76	LAW	Prof.
Fishman, Doris A.	F	34	75	PHA	Asst. Prof.
Flack, Steven L.	M	31	76	ART	Asst. Prof.
Floyd, Carlisle S.	M	34	76	MUS	Prof.
Forsyth, George A.	M	34	76	POL	Instructor
Francia, Arthur John	M	0	74	ACC	Assoc. Prof.
Fraser, Burt	M	34	49	CE	Assoc. Prof.
Furley, Edmund	M	31	64	ARC	Prof.
Ghazzaly, Osman I.	M	0	66	CE	Assoc. Prof.
Gibson, Isabel E.	F	34	49	C&I	Assoc. Prof.
Gingiss, Peter J.	M	34	70	ENG	Assoc. Prof.
Glaser, Eilene B.	F	34	76	ART	Asst. Prof.
Glover, John H.	M	34	75	EE	Asst. Prof.
Goodson, Carole E.	F	31	69	BST	Asst. Prof.
Gore, Blanche A.	F	34	48	HEC	Assoc. Prof.
Goyert, Philip R.	M	34	76	ARC	Asst. Prof.
Grandinetti, Juliette K.	F	34	76	C&I	Instructor
Graves, Leon F.	M	34	46	PHY	Assoc. Prof.
Gray, Dean O.	M	34	41	MTH	Assoc. Prof.
Griffin, Ricky W.	M	31	75	OBM	Instructor
Griffin, Robert E.	M	31	72	ARC	Asst. Prof.
Grinaker, Robert L.	M	34	65	ACC	Prof.
Grundy, Robert S.	M	35	75	LLB	Asst. Prof.
Gupton, Rosa K.	F	34	66	SPC	Asst. Prof.
Hall, John D.	M	34	76	LIB	Asst. Prof.
Harbachick, Stephen	M	34	66	MUS	Prof.
Hardy, George W. III	M	33	76	LAW	Prof.
Harper, Charles P.	M	0	75	FIN	Asst. Prof.
Harvey, Helene E.	F	12	73	SW	Instructor
Haupt, Helen D.	F	34	66	MUS	Assoc. Prof.
Henderson, Bill	M	34	73	SPC	Asst. Prof.
Hendrix, Donald L.	M	0	74	BIO	Asst. Prof.
Hensley, Joseph E.	M	33	63	LAW	Prof.
Herling, Eleanor	F	31	76	LIB	Assoc. Prof.
Hice, Gilbert L.	M	31	75	HPE	Instructor
Hickman, David	M	34	69	ART	Assoc. Prof.
Hill, Edward	M	34	76	ART	Assoc. Prof.
Hippard, James J. Sr.	M	33	68	LAW	Prof.
Hirsh, Albert	M	12	53	MUS	Prof.
Hope, Samuel M.	M	12	75	PHA	Asst. Prof.
Horak, Bohuslav	M	12	66	ART	Assoc. Prof.
Hordes, Mark William	M	34	76	SW	Instructor
Horvitz, Jerome S.	M	36	76	ACC	Assoc. Prof.
Hosler, William W.	M	0	75	HPE	Asst. Prof.
Houston, Carl P.	M	34	48	RCT	Prof.
Howard, Karen J.	F	34	76	SPC	Instructor
Hsu, Rosa C.	F	34	75	LIB	Asst. Prof.
Huber, Stephen K.	M	0	74	LAW	Assoc. Prof.
Hurt, Worth B.	M	34	60	ET	Assoc. Prof.
Hutchens, Richard C.	M	34	66	ART	Assoc. Prof.
Hyde, Samuel R.	M	34	61	LIB	Assoc. Prof.
Ignatiev, Alex	M	0	74	PHY	Asst. Prof.
Indakwa, John	M	34	69	SPA	Assoc. Prof.
Indakwa, John	M	34	69	AAS	Assoc. Prof.
Jacks, Marianne D.	F	34	66	C&I	Instructor
Jackson, Judith Anne	F	34	77	LLB	Asst. Prof.
Jandhyala, Bhagavan S.	M	0	73	PHA	Assoc. Prof.
Jenkins, William R.	M	34	61	ARC	Prof.
Jennings, David M.	M	34	76	ACC	Instructor
Johnson, Nancy K.	F	34	70	BST	Asst. Prof.
Johnson, Willis Nathaniel	M	34	73	C&I	Asst. Prof.
Johnson, Willis Nathaniel	M	34	73	EDU	Asst. Prof.
Jones, Elizabeth Ann	F	31	76	OPU	Instructor
Kaplan, Charles Paul	M	31	75	GGY	Asst. Prof.
Karchmer, Sylvan N.	M	34	67	ENG	Prof.
Karns, Judy D.	F	31	77	PHA	Instructor
Keeland, Burdette	M	31	60	ARC	Prof.
Kenney, Christopher	M	0	76	CHE	Prof.
Kerns, Ronald L.	M	31	67	OPT	Assoc. Prof.
Kilpatrick, Charles V.	M	34	47	CHE	Prof.
Klewer, Edwin D.	M	34	73	CST	Asst. Prof.
Klongkomnaunkarn, Linda	F	12	76	LIB	Asst. Prof.
Kolenda, Pauline	F	0	63	ANT	Prof.
Kopel, Kenneth	M	0	76	FED	Adjunct Asst. Prof.
Kouri, Donald	M	0	67	CHM	Prof.
Kretlow, William J.	M	34	71	FIN	Assoc. Prof.
Kunnecke, Jacqueline	F	34	76	HEC	Instructor
Kunnecke, Jacqueline	F	34	76	C&I	Instructor
Lack, Fredell	F	16	69	MUS	Prof.
Lamotte, Lynn R.	M	0	74	QMS	Assoc. Prof.
Landsman, Lewis A.	M	0	76	OPT	Assoc. Prof.
Lansdon, Gay	F	12	73	ART	Asst. Prof.
Larks, Jack	M	34	71	CT	Assoc. Prof.
Larson, Ronald E.	M	36	75	PHA	Asst. Prof.
Larue, David W.	M	34	76	ACC	Instructor
Lash, Warren L.	M	34	75	MUS	Asst. Prof.
Leach, William J.	M	34	51	CE	Assoc. Prof.
Lecompte, Margaret D.	F	34	73	FED	Asst. Prof.
Lee, Robert E.	M	31	76	SW	Instructor
Lee, Walter C.	M	12	56	OPT	Instructor
Lelek, Andrew S.	M	0	70	MTH	Prof.
Lemmel, Bernhardt	M	34	50	ART	Assoc. Prof.
Lence, Ross M.	M	31	71	POL	Asst. Prof.
Lerner, Jeffrey C.	M	34	56	MUS	Prof.
Levi, Dennis M.	M	33	72	OPT	Asst. Prof.
Lewallen, Fred D.	M	34	76	ET	Assoc. Prof.
Liberman, David B.	M	36	76	FED	Asst. Prof.
Lienau, Henry E.	M	31	62	ART	Asst. Prof.
Lilliott, Richard Jr. W.	M	34	45	AHC	Prof.
Lindsey, Jefferson F.	M	34	68	ET	Assoc. Prof.
Lindsey, Robert F.	M	34	59	ARC	Assoc. Prof.
Link, Valentine J.	M	34	70	ART	Assoc. Prof.
Linton, Thomas D.	M	0	74	EE	Asst. Prof.
Lipscomb, Joseph D.	M	34	75	FIN	Instructor
Lively, Clarence R.	M	31	52	ARC	Prof.
Locander, William D.	M	0	73	MKT	Asst. Prof.

[THIS PAGE INTENTIONALLY LEFT BLANK]

NAME	SEX	DEGREE	SERVICE	DEPT.	JOB TITLE
Lofstrom, James O.	M	12	74	BST	Adjunct Prof.
Long, Stuart A.	M	0	74	EE	Asst. Prof.
Luke, Auley B.	M	34	50	SPC	Asst. Prof.
Lund, Thomas Alan	M	0	74	LAW	Assoc. Prof.
Lundy, Victor Alfred	M	31	76	ARC	Prof.
Lynn, Robert B.	M	34	71	MUS	Assoc. Prof.
Malin, Jane P.	F	31	72	PSY	Asst. Prof.
Malone, James V.	M	34	61	ET	Assoc. Prof.
Man, Melissa E.	F	34	68	HEC	Asst. Prof.
Manahan, Jervis R.	M	34	48	CT	Assoc. Prof.
Mandola, Anthony J.	M	31	66	CTD	Instructor
Marek, Gloria S.	F	34	75	SW	Instructor
Matson, Jack V.	M	34	74	CL	Asst. Prof.
Matthews, James T.	M	34	55	MUS	Prof.
Matthews, Thomas S.	M	34	69	ET	Assoc. Prof.
McCallick, Hugh E.	M	34	64	RCT	Prof.
McDaniel, Clyde O.	M	0	74	SW	Prof.
McDermott, James M.	M	34	71	ART	Assoc. Prof.
McDougle, Clyde C.	M	34	54	HPE	Assoc. Prof.
McGaw, Jessie B.	F	34	52	ENG	Asst. Prof.
McKay, George C. Jr.	M	31	47	ET	Prof.
McKee, Gordon W.	M	33	70	OPT	Assoc. Prof.
McWhorter, Archer Jr.	M	0	74	QMS	Asst. Prof.
Meador, John M.	M	34	73	LIB	Asst. Prof.
Medlicott, Barbara E.	F	34	76	DRA	Asst. Prof.
Mieszkowski, Peter M.	M	0	74	ECO	Prof.
Miller, Phyllis K.	F	0	72	C&I	Asst. Prof.
Millham, James F.	M	34	72	PSY	Asst. Prof.
Millward, Peter G.	M	36	76	ART	Asst. Prof.
Milne, Nidia Dora	F	0	74	C&I	Asst. Prof.
Mindiola, Tatcho Jr.	M	34	74	SOC	Instructor
Mindiola, Tatcho Jr.	M	34	74	MAS	Instructor
Mitchell, Alfred C.	M	34	66	QMS	Prof.
Mitchell, Jennifer Hardy	F	34	76	HPE	Instructor
Mixon, John	M	33	59	LAW	Prof.
Mlela, Johannes G.	M	34	76	SPA	Asst. Prof.
Moffit, William C.	M	34	69	MUS	Assoc. Prof.
Money, Geralean	F	34	76	SW	Instructor
Montanari, John R.	M	34	76	OBH	Asst. Prof.
Moore, Herbert H.	M	33	71	OPT	Assoc. Prof.
Morgan, Jeanette	F	34	63	ENG	Inst.
Morrison, Caroline F.	F	34	64	ENG	Instructor
Moy, Mamie W.	F	34	53	CHM	Assoc. Prof.
Myers, Stanley M.	M	31	66	OPT	Assoc. Prof.
Neibel, John B.	M	33	56	LAW	Prof.
Nelson, Ruth	F	34	76	HPE	Instructor
Newsome, Judith A.	F	34	77	SW	Instructor
Nimmer, Raymond C.	M	33	75	LAW	Asst. Prof.
Nordstrom, Joseph A.	M	34	70	QMS	Assoc. Prof.
Nutt, Janice M.	F	34	76	LIB	Asst. Prof.
Oakes, James H.	M	34	75	FIN	Instructor
Ogren, Evelyn M.	F	36	76	SW	Asst. Prof.
Orgain, Marian M.	F	34	67	LIB	Assoc. Prof.
Parkin, Derral	M	34	76	LIB	Asst. Prof.
Parks, Michael Sydney	M	34	73	QMS	Asst. Prof.
Paschal, John Myron Jr.	M	0	76	ET	Asst. Prof.
Patry, Roland Albert	M	34	77	PHA	Asst. Prof.
Paul, Arthur N.	M	34	63	IE	Assoc. Prof.
Paul, Florence M.	F	34	47	BST	Assoc. Prof.
Pearce, Douglas K.	M	34	73	ECO	Asst. Prof.
Perrigin, David Mathis	M	33	72	OPT	Asst. Prof.
Perry, Jane L.	F	34	70	HPE	Asst. Prof.
Perry, John E.	M	34	68	ARC	Assoc. Prof.
Petrilli, Ralph S.	M	34	76	LAW	Prof.
Pickett, Cecil J.	M	34	70	DRA	Assoc. Prof.
Piper, Martha K.	F	34	73	C&I	Asst. Prof.
Porter, Mittie Camellia	F	34	77	ACC	Instructor
Porter, Michael Joseph	M	34	75	COM	Asst. Prof.
Poteet, James M.	M	34	69	HIS	Assoc. Prof.
Pouncey, Lorene	F	31	56	LIB	Assoc. Prof.
Pozzi, Dora C.	F	31	67	SPA	Asst. Prof.
Pratchett, Patricia Ann	F	34	75	LIB	Asst. Prof.
Pratt, James W.	M	31	72	ACC	Assoc. Prof.
Preston, Mary J.	F	30	67	MUS	Assoc. Prof.
Price, Maureen E.	F	34	75	PHA	Asst. Prof.
Quinn, Janet A.	F	34	76	SPC	Instructor
Quintanilla, G.	F	31	69	MAS	Asst. Prof.
Quintanilla, G.	F	31	69	C&I	Asst. Prof.
Quintanilla, G.	F	31	69	SPA	Asst. Prof.
Rabalais, John Wayne	M	0	75	CHM	Assoc. Prof.
Rada, Roy F.	M	34	77	CSC	Instructor
Rainey, Paul E.	M	34	75	MT	Asst. Prof.
Rankin, Fred W. Jr.	M	34	66	CE	Asst. Prof.
Red, David D.	M	31	47	ARC	Prof.
Redmond, Sonjia P.	F	34	76	SW	Instructor
Reichle, Marvin N.	M	34	66	HPE	Assoc. Prof.
Reschke, Barbara H.	F	34	76	ENG	Instructor
Reynolds, Ann	F	34	76	SW	Instructor
Rhyne, James R.	M	34	72	CSC	Asst. Prof.
Richdale, James C. Jr.	M	31	76	COM	Prof.
Rifaat, Ismail I.	M	31	77	ARC	Adjunct Asst. Prof.
Rifaat, Shafik I.	M	34	74	ARC	Assoc. Prof.
Riskin, Leonard L.	M	0	74	LAW	Assoc. Prof.
Rivera, Jaime R.	M	34	76	SW	Instructor
Robbins, Virginia Cooke	F	34	76	SW	Instructor
Roberts, David	M	34	68	SW	Assoc. Prof.
Robertson, Ann M.	F	34	67	LIB	Assoc. Prof.
Robinson, Elizabeth Ann	F	34	71	DRA	Asst. Prof.
Rodgers, Covington L.	M	34	74	LIB	Asst. Prof.
Rodriguez, Meriemil	F	34	76	COM	Asst. Prof.
Rogers, Curtis A.	M	34	46	MTH	Assoc. Prof.
Romanelli, Frank	M	34	70	HRM	Asst. Prof.
Rosales, Francisco A.	M	34	75	HIS	Instructor
Rosales, Raul G.	M	34	74	AED	Asst. Prof.

NAME	SEX	DEGREE	SERVICE	DEPT.	JOB TITLE
Rosborough, Elsa R.	F	34	47	HEC	Instructor
Rosenberg, Irene	F	12	74	LAW	Asst. Prof.
Rosenberg, Yale L.	M	33	73	LAW	Assoc. Prof.
Rotenberg, Daniel L.	M	33	76	LAW	Prof.
Rouse, Sue	F	34	49	PHA	Assoc. Prof.
Rutstein, Robert P.	M	33	75	OPT	Asst. Prof.
Said, Kamale	M	34	71	ACC	Assoc. Prof.
Santa Cruz, Luciano A.	M	0	74	SW	Asst. Prof.
Schaenen, Lee	M	0	76	MUS	Assoc. Prof.
Schneider, William P.	M	34	67	EE	Prof.
Schram, Karl H.	M	0	77	PHA	Asst. Prof.
Schultz, John S.	M	33	75	LLB	Assoc. Prof.
Scott, Gwendolyn S.	F	34	75	SW	Instructor
Seaman, John R.	M	34	75	SW	Assoc. Prof.
Semple, John	M	34	72	ART	Asst. Prof.
Seufer, Elizabeth J.	F	34	59	BST	Assoc. Prof.
Shamsundar, Nagaraja	M	34	75	ME	Asst. Prof.
Shaw, Betty Harden	F	34	75	C&I	Instructor
Sheinberg, Sheila D.	F	34	69	SOC	Asst. Prof.
Shepard, Ira B.	M	33	75	LAW	Assoc. Prof.
Sibley, Robert A.	M	34	67	CSC	Assoc. Prof.
Silman, James B.	M	34	63	SPA	Asst. Prof.
Singhurse, Sondra S.	F	34	76	AGC	Instructor
Smith, Barton A.	M	34	73	ECO	Asst. Prof.
Smith, Carolyn B.	F	34	72	SPC	Asst. Prof.
Smith, Donald I.	M	34	75	HRM	Asst. Prof.
Smith, Dorcas	M	34	55	LIB	Asst. Prof.
Smith, Eugene L.	M	33	75	LAW	Prof.
Smith, Lowell M.	M	34	64	HPE	Instructor
Smith, Marvin B.	M	34	67	IE	Asst. Prof.
Smith, Mary R.	F	34	69	HEC	Asst. Prof.
Smith, Roger S.U.	M	0	74	GEO	Asst. Prof.
Sorenson, David M.	M	0	77	CED	Adjunct Assoc. Prof.
Speary, William A.	M	34	60	BST	Assoc. Prof.
Stack, Gael	F	34	75	ART	Instructor
Stahl, Sandra K.D.	F	34	75	ENG	Asst. Prof.
Stansberry, Catherine A.	F	34	75	LIB	Asst. Prof.
Starr, Douglas A.	M	0	75	ACC	Instructor
Sterba, Richard L.	M	34	69	OBM	Assoc. Prof.
Stetson, Elton	M	36	76	C&I	Asst. Prof.
Stone, C. Addison	M	34	75	PSY	Asst. Prof.
Stoughton, Bruce C.	M	34	49	IE	Prof.
Stoughton, Bruce C.	M	34	49	COE	Prof.
Stout, Richard G.	M	34	69	ART	Assoc. Prof.
Suzuki, Eisuke	M	0	75	LAW	Asst. Prof.
Swain, August M.	M	34	70	SW	Asst. Prof.
Szilagyi, Andrew D.	M	34	73	OBM	Asst. Prof.
Tannenbaum, Sol	M	0	57	SOC	Assoc. Prof.
Tatlock, John H. III	M	34	77	POL	Asst. Prof.
Taylor, Audrey J.	F	31	77	LIB	Asst. Prof.
Taylor, James C.	M	34	47	HRM	Prof.
Taylor, Stephen W.	M	34	49	COM	Assoc. Prof.
Tedin, Kent L.	M	0	74	POL	Asst. Prof.
Thomas, Helen S.	F	0	60	ENG	Assoc. Prof.
Thomas, Michael D.	M	0	75	SPA	Asst. Prof.
Thompson, Jack U.	M	31	66	OPT	Asst. Prof.
Timme, Robert H.	M	31	72	ARC	Asst. Prof.
Tolotti, Frances Carolee	F	34	77	LLB	Asst. Prof.
Tomas, Douglas	M	34	76	C&I	Assoc. Prof.
Tomfohrde, Betty Ruth	F	12	76	MUS	Asst. Prof.
Valdivieso, Jaime	M	34	68	SPA	Prof.
Vick, D. Marie Pitts	F	34	62	HPE	Asst. Prof.
Vincent, John P.	M	34	72	PSY	Asst. Prof.
Walker, Judith A.	F	3	75	BED	Asst. Prof.
Walker, Philip William	M	34	73	MTH	Assoc. Prof.
Walters, Anne Elizabeth	F	31	76	MUS	Instructor
Walters, James W.	M	0	75	OPT	Assoc. Prof.
Warner, Allen R.	M	34	73	C&I	Asst. Prof.
Watson, Jon Thomas	M	34	72	OPT	Asst. Prof.
Watson, Linda L.	F	34	66	MUS	Asst. Prof.
Webb, Bruce	M	34	73	ARC	Asst. Prof.
Weber, Hans H.	M	31	75	LIB	Assoc. Prof.
Wechsler, Sheldon	M	34	77	OPT	Assoc. Prof.
Weldon, Roberta Frances	F	0	73	ENG	Asst. Prof.
Westervelt, Linda	F	31	77	ENG	Asst. Prof.
Weymann, Thomas F.	M	34	75	MKT	Instructor
White, Ardine A.	M	33	47	LAW	Prof.
White, Dennis W.	M	36	76	C&I	Asst. Prof.
Wickham, Robert D.	M	34	73	HRM	Instructor
Willcott, Mark R.	M	0	65	CHM	Prof.
Williams, James F.	M	33	71	OPT	Asst. Prof.
Williams, Michael D.	M	34	70	MUS	Asst. Prof.
Williams, Roy Lee	M	34	73	MT	Assoc. Prof.
Williamson, Margaret M.	F	34	65	LIB	Assoc. Prof.
Williamson, William J.	M	33	72	LAW	Prof.
Wilson, Robert Mark	M	34	75	ECL	Asst. Prof.
Wong, Siu G.	F	33	73	OPT	Asst. Prof.
Wren, H. M.	M	0	65	ENG	Assoc. Prof.
Wright, James H.	M	33	60	LAW	Prof.
Young, George E.	M	34	57	HRM	Asst. Prof.
Zemanek, John E.	M	34	64	ARC	Assoc. Prof.
Zivley, Sherry A.	F	34	75	ENG	Asst. Prof.
Zubel, Ambrose D.	M	34	57	HPE	Assoc. Prof.

Opposition

81-1861

NO. [redacted]

Office - Supreme Court, U.S.
FILED
MAR 24 1982
ALEXANDER L. STEVAS,
CLERK

* * *

IN THE
SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1981

* * *

THE UNIVERSITY OF HOUSTON, ET AL.,
Cross-Respondents

V.

JEANNINE W. WILKINS AND
SHARON D. HILL
Cross-Petitioners

* * *

BRIEF IN OPPOSITION TO THE CROSS-PETITION FOR WRIT OF CERTIORARI

* * *

PAT BAILEY
General Counsel
University of Houston

Of Counsel

MARK WHITE
Attorney General of Texas

JOHN W. FAINTER, JR.
First Assistant Attornet General

RICHARD E. GRAY, III
Executive Assistant
Attorney General

PAUL R. GAVIA
Chief, State and County
Affairs Division

LONNY F. ZWIENER
Assistant Attorney General

P.O. Box 12548, Capitol Station
Austin, Texas 78711
(512) 475-3131

Counsel for Cross-Respondents

QUESTIONS PRESENTED FOR REVIEW

Cross-Petitioners detail three questions assertedly presented for review. Cross-Respondents feel that the questions can more properly be stated as follows:

1. Whether there was any proof offered by Cross-Petitioners Wilkins and Hill giving rise to even a prima facie case of sex discrimination by Cross-Respondents University of Houston, et al., and

2. Whether the question of class discrimination as to sex at the University of Houston ever became an issue where the class was improperly certified inasmuch as the purported class was not homogeneous either as to qualifications of or alleged harm suffered by the putative members as required by *East Texas Motor Freight System v. Rodriguez*, 431 U.S. 395 (1977).

PARTIES TO THE PROCEEDING

The Cross-Petitioners, Plaintiffs in the District Court and Appellants in the Court of Appeals for the Fifth Circuit are:

Jeannie W. Wilkins and Sharon D. Hill.

The Cross-Respondents, Defendants in the District Court and Appellees in the Court of Appeals are:

The University of Houston and KUHT-TV.

SUBJECT INDEX

PAGE

QUESTIONS PRESENTED FOR REVIEW i

PARTIES TO THE PROCEEDING ii

SUBJECT INDEX iii

INDEX OF AUTHORITIES iv

OPINIONS BELOW 1

JURISDICTION 2

STATUTORY PROVISIONS INVOLVED 2

STATEMENT OF THE CASE 2

REASONS FOR DENYING THE CROSS-PETITION FOR WRIT OF CERTIORARI 4

CONCLUSION 13

CERTIFICATE OF SERVICE 16

INDEX OF AUTHORITIES

Cases **Page**

East Texas Motor Freight System, Inc. v. Rodriquez,
431 U.S. 395 (1977) 3,12

Falcon v. General Telephone Co. of Southwest,
626 F.2d 369 (5th Cir. 1980) 4

Hazelwood School District v. United States
433 U.S. 299 (1977) 7

O'Shea v. Littleton
414 U.S. 488 (1974) 13

Statutes

42 U.S.C. §2000e, *et seq* 2

Rules

Rule 23(c)(2), F.R.Civ.P. 3

NO. _____

* * *

IN THE
SUPREME COURT OF THE UNITED STATES
October Term, 1981

* * *

THE UNIVERSITY OF HOUSTON, ET AL.,
Cross-Respondents

V.

JEANNINE W. WILKINS AND
SHARON D. HILL
Cross-Petitioners

* * *

BRIEF IN OPPOSITION TO THE CROSS-PETITION FOR WRIT OF CERTIORARI

* * *

The University of Houston, et al., Cross-Respondents, respectfully request that this Court deny the Cross-Petition for Writ of Certiorari filed by Cross-Petitioners Jeannine W. Wilkins and Sharon D. Hill seeking review of a decision of the United States Court of Appeals for the Fifth Circuit; Petitioners further request that their Petition for Certiorari be granted.

OPINIONS BELOW

The opinion of the United States District Court for the Southern District of Texas is reported at 471 F.Supp. 1054.

The original opinion of the Court of Appeals for the Fifth Circuit is reported at 654 F.2d 338. The opinion of the Court of Appeals on rehearing is reported at 662 F.2d 1156.

All opinions are reproduced in the Appendices to the Petition and Cross-Petition for Writs of Certiorari.

JURISDICTION

The first opinion of the Court of Appeals for the Fifth Circuit was entered on August 28, 1981. The opinion on rehearing was filed on December 7, 1981.

The Petition for Writ of Certiorari was received by Cross-Petitioners on March 8, 1982, according to the Cross-Petition which was filed on April 6, 1982. Jurisdiction of the Cross-Petition was invoked under 28 U.S.C. §1254(1) and Rule 19.5 of the Supreme Court Rules.

STATUTORY PROVISIONS INVOLVED

This case was filed by Cross-Petitioners in the United States District Court for the Southern District of Texas alleging violations of Title VII of the Civil Rights Act of 1964, 42 U.S.C. §2000e, *et seq.*

STATEMENT OF THE CASE

On April 24, 1975, Jeannine W. Wilkins and Sharon D. Hill, employees of the University of Houston, filed a Title VII suit (42 U.S.C. §2000e, *et seq.*) against the University and KUHT-TV, the University's television station, on behalf of themselves and a class of women, alleging that the University discriminated against women in a variety of its employment practices.

Respondents Wilkins and Hill moved for class certification on April 24, 1978, requesting certification of a class of "[a]ll female persons who have applied for or have been employed by Defendants University of Houston and/or KUHT-TV since June 14, 1972, or who may in

the future apply for or be employed by Defendants in those jobs defined as faculty or professional administrative positions by Defendants' records."

Although the University strongly opposed the certification of the class as defined by Respondents, the district court certified the class of women as requested on May 18, 1978. The University's request for notice to the class under Rule 23(c)(2), F.R.Civ.P. was also denied.

After a two week trial on the merits, the district court rendered judgment for the University on both the individual claims and the class claims.

On appeal, the University urged affirmance of the trial court's decision arguing that the court's findings of no discrimination as to the individuals and the class were correct.

Additionally, the University vigorously argued that the finding of no class discrimination should be affirmed by a holding that the class was improperly certified because the individual respondents did not have the qualifications to represent the myriad academic, administrative and professional positions at the University.

The Court of Appeals affirmed as to the individual cases, and largely as to the class members. How ever, the Court found that the respondents had made a prima facie case as to the academic division of the professional and administrative staff which was not rebutted. Reversal of the district court was ordered so that this segment of the case could be reconsidered on remand.

The Court of Appeals dismissed the University's claim of an erroneous class certification in footnote 2 of its first opinion noting:

> "Relying on *East Texas Motion Freight System, Inc.* v. Rodriquez, 431 U.S. 395, 97 S.Ct. 1891, 52 L.Ed.2d 453 (1977), the University argues that the class should not have been certified because the named plaintiffs were not qualified to hold the vast majority of faculty and

> administrative positions. In *Falcon v. General Telephone Co.* 626 F.2d 369, 375 (5th Cir. 1980), we rejected defendants' argument that *Rodriquez* bars the kind of 'across the board' attack on discriminatory employment practices plaintiffs have made in this case.'"[1]

The Petition for Writ of Certiorari challenged the Court of Appeals interpretation and rejection of the doctrine of *East Texas Motor Freight System* and its continued approval of "across the board" class certifications, urging that since there was not a proper class, there could be no viable finding as to class discrimination whatever evidence was presented.

The Cross-Petition for Writ of Certiorari urges errors of the Court of Appeals in interpreting the evidence as to class discrimination and ignores the University's attack of the class as certified. No relief is sought with respect to the Court of Appeals affirmance of the district court's finding of no discrimination as to the two individual plaintiffs.

This Brief in Opposition to the Cross-Petition argues first, that there was *no material* evidence to demonstrate class discrimination and second, *arguendo*, that however strong the showing of University-wide discrimination, there was no viable class to which the evidence of discrimination could attach and apply.

REASONS FOR DENYING THE CROSS-PETITION FOR WRIT OF CERTIORARI

1. NO RELEVANT AND MATERIAL EVIDENCE WAS ADDUCED BY CROSS-PETITIONERS (PLAINTIFFS IN THE DISTRICT COURT) TO DEMONSTRATE

---

1. This Court granted Certiorari in the *Falcon* case on December 7, 1981.

DISCRIMINATION WITH RESPECT TO THE CLASS OF WOMEN EMPLOYEES AND APPLICANTS AT THE UNIVERSITY OF HOUSTON.

The principal vice of the statistical evidence presented by Cross-Petitioners (Plaintiffs in the District Court) was the failure to include the availability of qualified women for the various positions—faculty, administrative, and professional—at the University of Houston.[2] This shortcoming, the failure to show availability, was compounded by use of statistics which failed to consider, in an integrated and interrelated form, factors affecting salary, such as departmental position, rank, length of time and rank, type of degree, total length of time in service, etc.

However, it should initially be observed that the non-statistical evidence of class discrimination or the lack thereof, strongly supported the district court's finding of no class discrimination. This other, non-statistical evidence demonstrated that the University had great concern for the equitable treatment of its women faculty members and employees. Studies were initiated to campare salaries of men and women faculty members and to correct any discernible salary deviations. A professional/administrative study was made and a schedule of such positions was made in order to eliminate any chance of discrimination.

Norma Schnieder, the University EEO Officer, testified that the University was sensitive to minority problems. Norma Bender, manager of personnel for the University, did not perceive any discrimination at the University. Only two women faculty members testified for plaintiffs (Cross-Petitioners) at the trial as to discrimination generally, Dr. Janet Chafitz and Majorie McCorquodale. Both testified that they had been treated

---

2. Cross-Petitioners' claim of evidence of availability as set out in the cross-petition is spurious as will be shown below.

fairly and that the University reacted expeditiously to their requests to study and compare the salaries of women as opposed to men and that positive steps were taken to insure against discrimination. Interestingly, Dr. Chafitz' salary was greater than that of her husband, also a faculty member.

Indeed, if the claims of Jeannine W. Wilkins and Sharon Hill, the individual claimants, were the best cases of alleged sex discrimination which could be found at the University, then the University was a model of fair treatment of women.

Statistical evidence presented by Plaintiffs (Cross-Petitioners) is worthless to show sex discrimination. Nowhere did Plaintiffs' statistician consider the respective availability of qualified men and women for either faculty positions or administrative and professional positions. (Some evidence indicated the availability of newly graduated women PhDs for faculty positions, but this information is meritless and can only be material when keyed only to lower faculty positions which could be filled by a new PhD; and Cross-Petitioners failed to make this relevance-required calculation. In hiring at the full professor or associate professor rank, consideration is given only to PhDs with experience and a history of scholarly achievment.[3]) Without evidence of

---

3. Cross-Petitioner argues in footnote 1, page 4 of the Cross-Petition that the percentage of women has declined over the six years covered by this case. This is specious and based only on the numbers of full professors and associate professors hired during a period of rapid expansion and growth of the University, positions where there were few experienced women qualified to accept such advanced professorships. When all faculty positions are considered, including the assistant professorships which can be filed by new PhDs, Plaintiffs' own evidence showed that the percentages of women hired has been greater than men since 1972. And in the case of professional and administrative positions (where there was some applicant flow data although no qualification information), the rate of rejections for women was less than for men since 1972.

availability of women to fill University positions, any statistical comparisons which deal with the respective numbers of women as opposed to men in any particular position are of no evidentiary value.[4] *Hazelwood School District v. United States*, 433 U.S. 299 (1977).

The University presented a statistical analysis for one year with respect to salaries of faculty members who were employed in 1977. The University constructed (in the language of statisticians) linear models which purport to take into account most of the factors which are thought to be academically significant in the setting of salaries, these factors being taken into consideration together or simultaneously rather than individually or separately as Plaintiffs presented their statistics. In the first linear model, the following factors were considered as having an effect on faculty salaries:

1. The department in which faculty members are employed;
2. Experience as a non-tenured instructor at the University of Houston and elsewhere;
3. Experience as a faculty member before coming to the University of Houston;
4. Experience as a full professor at the University of Houston;
5. Experience as an associate professor at the University of Houston;
6. Experience as an assistant professor at the University of Houston;
7. Doctoral degree other than PhD; and
8. A PhD doctoral degree.

---

4. A cursory examination of the evidence reveals a bewildering array of faculty positions with a great disparity in qualifications and almost the same diversity of professional and administrative jobs calling for a wide spectrum of different qualifications.

Sex was not included as a factor and this first model explained 52.4% of the salary variations. The second model, as offered by the University, inserted sex as a factor; and even with sex included in the linear model, the model explained only 53.2% of the variations in salaries, an increase of only .8% insofar as explaining salary variations. The University contends that this small difference that sex plays in explaining salaries is not a statistically significant figure and the the figure is small enough to rule out sex as a factor in setting salaries at the University of Houston.[5]

Apparently, a linear model, which adds the *rank* of teaching personnel as an additional factor, produces even greater statistical evidence that sex is not a factor in salary variations. With rank added to the other factors mentioned above, 72.3% of all salary variations are explained in terms other than sex. With sex added to such model, 72.4% of salary variations are explained, an increase of only .1%.[6] This increase is statistically insignificant.[7]

The statistical evidence offered by the University demonstrated that sex was not a factor in the setting of salaries and in promotions at the University.

---

5. Cross-Petitioners and, indeed, the Court of Appeals, completely miss the point of the evidence of these models in their discussion of the results. There may be differences in the salaries of women, as Cross-Petitioners note, but such differences cannot be explained by sex where the variance between the model without sex factor and the model with sex added as a factor is very low.

6. The University attempted to reopen the evidence to introduce the linear models with rank added.

7. Cross-Petitioners argue at page 23 of the Cross-Petition that the Court of Appeals required statistics to be in the form of a multiple regression analysis. This is incorrect. Rather, the Court rejected statistics in the form presented by Cross-Petitioners.

However, whether or not the University's statistical evidence has any efficacy, Cross-Petitioners' statistical evidence is deceptive and false and in no way demonstrates the presence of sex discrimination.

Plaintiffs (Cross-Petitioners) introduced in the district court what purported to be statistical evidence of class discrimination through Dr. Robert Thrall, a professor at Rice University. Dr. Thrall produced a series of charts in which faculty men and women at the University were compared in certain ways, *i.e.*, salary generally, salary by rank, salary by length of service, and salary by age. In no chart did he combine the various factors which are important in setting salaries: the department where employed, rank, length of time in rank, and other factors which are relevant in the determination of salaries. Similar statistical analyses were constructed for non-academic employees.

This separate, uncombined treatment of pertinent factors is statistically unsound, and even Dr. Thrall admitted that the use of his charts can be misleading.

For example, one of Dr. Thrall's statistical charts purportedly showed the difference in faculty salaries of men and women, university-wide. This exhibit showed graphically by the use of line bars that the mean salary of male professors is greater than the mean salary of female faculty members. It is readily apparent that such a salary comparison proves nothing. For example, if the factor of department employment is added in (or filtered out), the line bars representing the salaries of men and women would necessarily narrow. The School of Engineering has 77 professors, all men, with an average monthly salary of approximately $2,800, and the School of Law has 30 men law professors and two women with an approximate monthly salary of $3,250. These are the highest departmental mean salaries in the University. If only these two schools were dropped from the chart, it is obvious that the remaining difference between men and women, even on a university-wide basis, would be sharply decreased.

Adding the factors of rank and length of service would also reduce differences. Ten years ago men were predominate in universities and, accordingly, have more rank and service. And these men cannot be discharged because of the concepts of tenure, reverse sex discrimination and fairness.

It does not help much for charts to be constructed on a school-wide basis which Dr. Thrall also offered. While the departmental effect on salaries may be eliminated in part (but not completely because there are big differences in salary means between departments of the same school), the effect of rank and length of service is not considered in such charts (again men are more likely to have greater rank and service).

Indeed, the manner of charting statistical information as used by Dr. Thrall leads inevitably to absurd results. Consider a two-department university:

1. An English Department with 30 full professors consisting of

   20 men with an annual salary of $20,000
   10 women with an annual salary of $20,000
   All have 20 years of teaching experience

   (No discrimination is detected, the mean salary of the 30 professors is $20,000 and all have the same rank and length of service.)

2. A Science Department with 20 full professors consisting of

   20 men with an annual salary of $30,000
   All have 15 years teaching experience

   (The 20 men have a mean salary of $30,000 and all have the same rank and experience.)

When the departments are lumped together, a la Thrall, the absurdities become evident:

20 men in Science have a mean salary of $30,000
20 men in English have a mean salary of $20,000
The mean salary of the 40 men is $25,000

The average years of experience
(20 men with 20 years and 20 men
with 15 years) is 17½ years

10 women in English have a mean salary of $20,000
The average years of experience is 20 years.

Ergo, an instant case of sex discrimination. The women at the model university have a mean salary of $5,000 less than the men with an average of 2 1/2 years more teaching experience.

Using one of Dr. Thrall's simplest line-bar charts, men would show a monthly salary greater than that of women.

Another of Dr. Thrall's "more sophisticated" charts would show men having greater salaries with less experience than women with more experience.

All of Dr. Thrall's offered charts demonstrate the same absurdities.

It is painfully obvious that Cross-Petitioners use of statistics is, and must be, incorrect, misleading and deceptive.[8]

Cross-Petitioners' evidence of class discrimination was described by the Court of Appeals as a presentation of "crude and incomplete statistics" and was aptly analogized with the following characterization: "That everyone who has eaten bread has died may tell us something about bread, but not very much."

---

8. One is reminded of the book, "*How to Lie With Statistics*", authored by Harrell Huff, W.W. Nolan & Company, 1954.

Cross-Petitioners' evidence of class discrimination as presented at the trial of this cause was non-existent.

2. IN ANY EVENT, ARGUENDO, REGARDLESS OF WHETHER CROSS-PETITIONER PRESENTED MATERIAL EVIDENCE OF CLASS DISCRIMINATION, THE CROSS PETITION FOR WRIT OF CERTIORARI SHOULD BE DENIED SINCE THERE WAS NO VIABLE, HOMOGENEOUS CLASS OF WOMEN TO WHICH SUCH EVIDENCE COULD APPLY.

The two Plaintiffs in this case (Cross-Petitioners here) were Jeannine W. Wilkins and Sharon D. Hill. Wilkins was educated and engaged in the television film area while Hill was a clerk-typist employed as a junior administrator in the computer laboratory with duties involving the scheduling of computer time, billing, ordering supplies and hiring and supervising student computer operators.

As earlier noticed, the district court, over the University's vigorous opposition, made an across-the-board class certification as countenanced by the Court of Appeals for the Fifth Circuit and which is attacked in this case in the University's Petition for Writ of Certiorari. The class as certified included "[a]ll female persons who have applied for or have been employed by Defendants University of Houston and/or KUHT-TV since June 14, 1972 or who may in the future apply for or be employed by Defendants in those jobs defined as faculty or professional or administrative positions by Defendants' records."

Neither Wilkins nor Hill was shown to have the qualifications for any academic position or for any other position in the administrative or professional staff. Without such a showing, it was improper for the district court to certify a class of women which included the academic division. *East Texas Motor Freight System v. Rodriquez*, 431 U.S. 395 (1977).

Moreover, this "across-the-board" certification violates the injunction of *East Texas Motor Freight System* that "a class representative must be a part of the class and '*possess the same interest and suffer the same injury*' as the class members." 431 U.S. at 403, emphasis added.[9]

Here it is abundantly clear that Wilkins and Hill, as employees, could not and cannot represent women who were refused employment by the University of Houston, or women who were denied tenure, or women with a varied assortment of claims of discrimination in a myriad of skills and academic disciplines requiring completely different qualifications.[10]

There was no, there is no, and there can be no viable class of women employees at the University of Houston. Accordingly, there was no, and there can never be, any material evidence of class discrimination. Any discussion as to whether class action type evidence is material or sufficient to prove a prima facia class is completely academic. On this basis, no viable class, the Cross-Petition should be denied.

CONCLUSION

For the reasons stated above, the Cross-Petition for Writ of Certiorari should be denied.

However, Cross-Respondents' Petition for Writ of Certiorari should be granted, focusing as it does, on the distortion of the class-action device by the Court of Appeals for the Fifth Circuit.

---

9. Cross-Respondents' criticism of "across the board" class action certification is more fully set out in their Petition for Writ of Certiorari.

10. Incorporating future applicants and future employees into the class also raises "no case or controversy" problems. Article III, U.S. Constitution; *O'Shea v. Littleton*, 414 U.S. 488 (1974).

Respectfully submitted,

MARK WHITE
Attorney General of Texas

JOHN W. FAINTER, JR.
First Assistant Attorney General

RICHARD E. GRAY, III
Executive Assistant Attorney General

PAUL R. GAVIA
Chief, State and County Affairs

LONNY F. ZWIENER
Assistant Attorney General
Bar No. 22299000
P. O. Box 12548, Capitol Station
Austin, Texas 78711
(512) 475-3131

CERTIFICATE OF SERVICE

I, Lonny F. Zwiener, Assistant Attorney General of Texas and a member of the Bar of the Court, do hereby certify that three true and correct copies of the foregoing Brief in Opposition to the Cross-Petition for Writ of Certiorari has been served upon attorney for Cross-Petitioners by placing same in the United States mail, certified, return receipt requested, addressed to Mr. Stuart Nelkin, 5417 Chaucer, P.O. Box 25303, Houston, Texas 77005 on this _____ day of May, 1982.

LONNY F. ZWIENER